

ZEONICS SYSTECH

DEFENCE & AEROSPACE ENGINEERS (P) LTD.



PRODUCT CATALOGUE

"ADAR" No.3, 7th Cross, 10th Main, Maruthinagar, New Thippasandra Post, Bengaluru - 560075.

Phone : +91-80-25241900, 25241901, 8050092601, 8050092602, 8050092603, 8050092604

Email : contact@zeonicssystem.com, info@zeonicssystem.com, zeonicssystem@gmail.com,

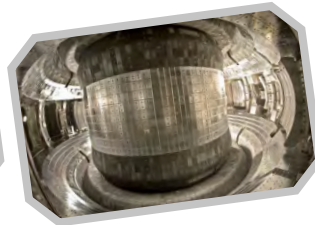
Website : www.zeonicssystem.com / www.systemcapacitors.com

ZEONICS SYSTECH

DEFENCE & AEROSPACE ENGINEERS (P) LTD.

PRODUCT CATALOGUE

Pioneers in Military Approved, Compact, Ultra Reliable
High Voltage Components, Subassemblies and Systems



IN SERVICE OF THE NATION SINCE 1981



"ADAR" No.3, 7th Cross, 10th Main, Maruthinagar, New Thippasandra Post, Bengaluru - 560075.
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Email : contact@zeonicssystech.com, info@zeonicssystech.com, zeonicssys@gmail.com,
Website : www.zeonicssystech.com / www.systechcapacitors.com



ZEONICS SYSTECH



MISSION STATEMENT

Continuously Strive to Achieve The Highest Research, Manufacturing & Testing Standards In Reliability, Safety, Performance & Efficiency of Weapon Electricals, Electronics & Nuclear Equipment for Futuristic Weapons Missiles & Radars Manufactured Indigenously In Our Country. Take the Country Ahead In The Most Advanced Armament Technologies Available Today. In The Future, Make Mother India Self Reliant In These Deprived Grey Technologies, Which Were Always Kept Away From India By Manufacturers All Over The World.

“Make Mother India A Super Power”

Jai Hind

**DR.Z.H.SHOLAPURWALA
MANAGING DIRECTOR**

AWARDS PHOTOS



CERTIFICATES



Certificate of Compliance

CE

We hereby declare that the technical file of product complied with the requirement of directives 2014/35/EU Low Voltage Directive & directives 2014/30/EU Electromagnetic Compatibility Directive

Certificate No.: CE-1798

Manufacturer
 Name : ZEONICS SYSTECH DEFENCE AND AEROSPACE ENGINEERS PVT LTD
 Address : ADAR NO.3 10 TH MAIN 7 TH CROSS MARUTHI NAGAR NEW THIPPASANDRA P O BANGALORE - 560075, INDIA
 Product : The Items Mentioned Below H.V Capacitors, Hydrophobicity System, PEMP (Pulsed Electric Magnetic Field), CBD System, NEMP /HEMP Filters, 500kv DC Load Bank, Collector And Cathode Transformer, Rail Gap, Isolation Switch 440V/11kv, Impulse Generator 1000kv, Compensated H.V Probe, H.V Distribution Block, H.V Power Supply Up To 300kVdc, H. V Cables (More Products AS Per Appendix - I)

The Certification body has performed an audit of the above product quality system covering the design, manufacture and final inspection of the certified product. The quality system has been assessed, approved and is subject to continuous surveillance according to Directive 2014/35/EU Low Voltage Directive & directives 2014/30/EU Electromagnetic Compatibility Directive.

This certificate is issued under the following conditions:

1. It applies only to the quality system maintained in the manufacture of above referenced models and it does not substitute the design or type examination procedures, if requested.
2. The certificate remains valid until the manufacturing conditions or the quality systems are changed.
3. The certificate validity is conditioned by positive results or surveillance audits.

The CE mark as shown above can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of conformity and compliance with all relevant EC Directives. The statement is based on a single evaluation of one sample of above mentioned product. It does not imply an assessment of the whole production.

Validity of this certificate can be verified at www.ukcertifications.org.uk/verify

Date of Certification	28 th September 2021
1 st Surveillance Audit Due	27 th September 2022
2 nd Surveillance Audit Due	27 th September 2023
Certificate Expiry (subject to the company maintaining its system to the required standard)	27 th September 2024

Daniel
 Authorised Signatory

Page 1 of 2
 This certificate is the property of UK Certification & Inspection Limited and shall be returned immediately on request.
 71-75 Shelton Street, Covent Garden, London, WC2H 9JQ, United Kingdom
 Website: www.ukcertifications.org.uk, email: info@ukcertifications.org.uk
 Company No. 1184781




CERTIFICATE

CDG Certification Limited
certifies that

Zeonics Systech Defence & Aerospace Engineers Private Limited
 Adar No. 3, 7th Cross, 10th Main Maruthi Nagar, Malleshpalya New
 Tippasandra, Post Bangalore- 560075, Karnataka, India

The Management System of the above organization has been audited and found to be in accordance with the requirements of management system standards detailed below:

ISO 9001:2015

Has established and applied Quality Management System for following scope of activities:

Manufacturers of HV Capacitors, HV Resistors, HV Diode Assemblies, HV Spark Gaps, Impulse Generators up to 1 Million Volts, HV Transformers, HV Power Supply, Load Banks, Trigger Generators and EMP/NEMP Systems

Certificate No. CCL/QMS/70506/ZSDAEPL Issue No.02 IAF Code: 18
 Validity of certificate is subjected to the continued satisfactory operation of the organization's Management System


Shah
 Managing Director

Originally Issue Date: 27/03/2019
 Current Issue Date: 02/03/2021
 Certificate Expiry Date: 26/03/2022
 Recertification Due Date: 26/03/2022

This document is issued by the CDG subject to its general terms & conditions available at www.cdgcertification.com. Authenticity of this document may be verified at <http://www.cdgcertification.com/CertRegist>. Any unauthorised alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. While an audit case and RIT was opened in carrying out the assessment, CDG Certificates issued remain the responsibility of the issuer. This certificate will automatically get cancelled if surveillance audit is not conducted successfully. This certificate remains property of CDG Certification Limited to whom it must be returned upon request.



CDG Certification Limited
 Corp Office: 8-7, Nelson Mandela Marg
 Vasant Kunj, New Delhi 110076
 Toll Free: 1800 848 0016
 E-mail: info@cdgcertification.com
 Website: www.cdgcertification.com

<p>दूरभाष/TEL : 26962819, 26567373 (EPABX) : 26565694, 26562133 26565687, 26562144 26562134, 26562122 फैक्स/FAAX : 26960629, 26529745 Website : http://www.dsir.gov.in</p>	 भारत सरकार विज्ञान और प्रौद्योगिकी मंत्रालय वैज्ञानिक और औद्योगिक अनुसंधान विभाग टेक्नोलॉजी भवन, नया महारौली मार्ग, नई दिल्ली - 110016 GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY Department of Scientific and Industrial Research Technology Bhavan, New Mehrauli Road, New Delhi - 110016
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F. No. TU/IV-RD/4145/2019 Dated: 4th September, 2019

M/s Zeonics Systech Defence & Aerospace Engineers Pvt. Ltd.
 ADAR, No. 3, 7th Cross, 10th Main,
 Maruthi Nagar,
 New Thippasandra P.O,
 Bangalore – 560 075 (Karnataka)


Subject: Registration of Research Institution, other than a Hospital, for the purpose of availing Customs duty exemption in terms of Government Notifications No. 51/96 - Customs dated 23.07.1996; No. 24/2007 - Customs dated 1.03.2007; No. 43/2017 - Customs dated 30.06.2017; No. 45/2017-Central Tax (Rate) & 47/2017-Integrated Tax (Rate) dated 14.11.2017; No. 9/2018 – Central Tax (Rate), No. 09/2018 Union Territory Tax (Rate) & No.10/2018-Integrated Tax (Rate) dated 25.01.2018; and State Tax (Rate) as applicable and all notification as amended from time to time.

CERTIFICATE OF REGISTRATION

This is to certify that the in-house R&D unit(s) of M/s Zeonics Systech Defence & Aerospace Engineers Pvt. Ltd. located at ADAR, No. 3, 7th Cross, 10th Main, Maruthi Nagar, New Thippasandra P.O, Bangalore (Karnataka) is/are registered with the Department of Scientific & Industrial Research (DSIR) for purpose of availing customs duty exemption in terms of Government Notification No. 51/96 - Customs dated 23.07.1996; No. 24/2007 - Customs dated 1.03.2007; No. 43/2017 - Customs dated 30.06.2017; No. 45/2017-Central Tax (Rate) & 47/2017-Integrated Tax (Rate) dated 14.11.2017; No. 9/2018 – Central Tax (Rate), No. 09/2018 Union Territory Tax (Rate) & No.10/2018-Integrated Tax (Rate) dated 25.01.2018; and State Tax (Rate) as applicable and all notification as amended from time to time. The registration is subject to terms and conditions mentioned overleaf.

This registration is valid upto 31.03.2022.

S. K. Deshpande
 (Dr S. K. Deshpande)
 Scientist - 'G'

<p>दूरभाष/TEL : 26962819, 26567373 (EPABX) : 26565694, 26562133 26565687, 26562144 26562134, 26562122 फैक्स/FAAX : 26960629, 26529745 Website : http://www.dsir.gov.in</p>	 भारत सरकार विज्ञान और प्रौद्योगिकी मंत्रालय वैज्ञानिक और औद्योगिक अनुसंधान विभाग टेक्नोलॉजी भवन, नया महारौली मार्ग, नई दिल्ली - 110016 GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY Department of Scientific and Industrial Research Technology Bhavan, New Mehrauli Road, New Delhi - 110016
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F. No. TU/IV-RD/4145/2019 Dated: 4th September, 2019

To
 M/s Zeonics Systech Defence & Aerospace Engineers Pvt. Ltd.
 ADAR, No. 3, 7th Cross, 10th Main,
 Maruthi Nagar,
 New Thippasandra P.O,
 Bangalore – 560 075 (Karnataka)

Subject: RENEWAL OF RECOGNITION OF IN-HOUSE R&D UNIT(s)

Dear Sirs,

This has reference to your application for renewal of recognition of your in-House R&D unit(s) beyond 31-03-2019 by the Department of Scientific and Industrial Research.

2. This is to inform you that it has been decided to accord renewal of recognition to the in-House R&D unit(s) of your firm at ADAR, No. 3, 7th Cross, 10th Main, Maruthi Nagar, New Thippasandra P.O, Bangalore (Karnataka) upto 31.03.2022. Terms and conditions pertaining to this recognition are given overleaf.

3. Kindly acknowledge the receipt of this letter.

Yours faithfully,
S. K. Deshpande
 (Dr S. K. Deshpande)
 Scientist - 'G'

ZEONICS SYSTECH DEFENCE & AEROSPACE ENGINEERS (P) LTD.

ABOUT US

Zeonics Systech Defence & Aerospace Engineers Private Limited was established by Dr Z H Sholapurwala in the year 1981 with the specific purpose of manufacturing High Voltage components and systems for the Government of India. We started as micro-scale unit mainly to design, develop and manufacture a wide variety of highly specialized equipment and components used for Defence, Atomic Energy and Strategic Applications.

Our unit now has one of the most sophisticated R&D Labs in the country, with state of the art equipment and manufacturing facilities, certified by DSIR - Department of Scientific and Industrial Research. The unit has now grown into macro-scale unit with the capability of handling all critical projects which are used for Radar, Missiles, Weapon systems and also food processing as well as medical technology. We also conduct some original research to aid the Government R&D labs to further their goals.

We manufacture advanced weapon technology systems to enable the armed forces to protect our Motherland. We also manufacture Spark Gaps, Rail Gaps, Pulse Transformers, High value asset protectors, different type of Nuclear Filters and Nuclear Protection Systems. The components manufactured by our unit are cost effective and very reliable. Most military approvals are complete for over 2500 products that have been developed in the past 40 years.

We will continue to strive to provide the best of technologies to help INDIA progress to greater heights.

“MAKE MOTHER INDIA A SUPER POWER!”

APPLICATIONS OF OUR PRODUCTS

- | | | |
|----------------------------------|--------------------------------------|------------------------------------|
| A) Defence Systems | H) Lasers –Medical/ Industrial | O) High Power Transmitters |
| B) Medical Electronics | I) Weapons, Radars, Missiles | P) UWB Radars |
| C) Fusion And Fission Programmes | J) Railway Rolling Stock | Q) Futuristic Weapons |
| D) Electron Tube Manufactures | K) Flash X-Rays Generation | R) Power Generation |
| E) Advanced Weapons | L) Neutron Generation | S) Diamond Industry |
| F) Explosives And Detonations | M) Electric And Diesel Locomotives | T) Sterilization And Food Industry |
| G) X-Ray Generators | N) Nuclear Reactors And Power Plants | U) Particle Accelerators |

FACILITES

- 22000 sqft fully equipped laboratory
- In House Testing Facility for most High Voltage Requirements
- R and D Laboratory -8000 sqft + 4000 sqft
- Assembly station -3000 sqft
- Open field laboratory -3,00,000 sqft and 1,10,000 sqft

INTRODUCTION

SOME OF THE NATIONAL and INTERNATIONAL STANDARDS WE FOLLOW

- * MIL – STD – 461 – B – RS– 107
- * MIL –STD – 461G
- * MIL – STD – 188 – 125 – 1
- * C Q A L
- * LCSO (Ministry of Defence) JSS 55555
- * DGQA
- * Atomic Energy Qualifications
- * BEL Qualifications
- * BHEL Qualifications

OUR DIRECTORS

Managing Director – Dr. Z H Sholapurwala

Dr. Z H Sholapurwala has been a pioneer for HV, Pulse Power and Nuclear technologies for India. He is Highly focused in his field and is an asset to the nation. He strongly believes in making India stronger by innovating High end technologies. After supplying to various strategic organisations in India, he has earned a reputation of reliability, quality and perfection. His aim is to make mother India strong and self-reliant in technologies unavailable in our country.

Commercial Director – Farzin Sholapurwala

After completing her BSc, Farzin Sholapurwala joined Zeonics Systech in 1991. She manages the accounts, finances and ensures the smooth running of the office. Her dedication has helped grow the company well.

Additional Director – Roshni Sholapurwala

After completing her Electrical Engineering from Stanford University, she has joined Zeonics Systech in 2016. Her goal is to increase the awareness of high end technologies in various other sectors like education, medicine, etc. She concentrates on exports and standardization. Her mission is to expand our technology and bring growth to every individual/organisation Zeonics Systech deals with.

Additional Director – Dinaz Sholapurwala

Dinaz Sholapurwala is an Electronics and Communication Engineer. She works with the technical and production teams. She strongly believes that simplicity in engineering is the best innovation. She wishes to drive Zeonics Systech to greater heights and provide better and better technology to the World.

INTRODUCTION

We at Zeonics Systech Defence and Aerospace Engineers have always been involved in several projects of national importance and in the past have designed, developed, manufactured and supplied projects/systems/components to many projects of national importance. Missiles, Radars, Weapons all being successful and used today to protect and guard our mother land "INDIA"

We have also diversified into Futuristic Electromagnetic Weapon systems, fast rise time Impulse Generators which are used for specialized weapons testing, etc. Many of our products qualify for the more rigorous environmental specifications as follows.

ENVIRONMENTAL SPECS FOR MILITARY GRADE EQUIPMENTS/COMPONENTS/SUB SYSTEMS:

	PARAMETER	GENERAL SPECS	SPECIAL SPECS
1)	Temperature Storage	-20°C TO 65°C	-30°C TO 85°C
2)	Temperature Working	-10°C TO 55°C	-20°C to 85°C
3)	Altitude	Typically 3000 m	Maximum 10 km
4)	Shock	Typically 5G to 50G	Maximum 100 G
5)	Vibration	0.02g ² /Hz from 10-60 Hz or 60-100Hz	(As per customer request)
6)	Humidity 95% RH At 40°C	-40°C to + 65°C	(As per customer request)
7)	Temperature Cycling	5 cycles	(As per customer request)
8)	Corrosion atmosphere	5% salt spray for 48 hours	(As per customer requirement)

Notice: (for export only)

For purchasing our products please get clearance from your respective governments to avoid any import ban on your side.

Please contact our sales department for further information. sales@zeonicsysstech.com

SOME OF OUR VALUED CUSTOMERS

- Indian Air Force
- Indian Army
- Indian Navy
- BARC
(Bhabha Atomic Research Centre), Mumbai
- C.E.E.R.I
(Central Electronics Engg. Research Institute), Pilani.
- RRCAT
(Raja Ramanna Centre for Advanced Technology), Indore.
- BHEL (Bharat Heavy Electrical Limited)
Bangalore, Haridwar, Bhopal.
- BEL (Bharat Electronics Limited)
Bangalore, Ghaziabad, Pune.
- NTPC (National Thermal Power Corporation)
- NPC (Nuclear Power Corporation).
- LRDE
(Electronics and Radar Development Establishment)
- ADE (Aeronautical Development Establishment)
- GTRE (Gas Turbine Research Establishment).
- TBRL (Terminal Ballistics Research Laboratory).
- DRDL (Defence Research and Development Laboratory)
- DLRL (Defence Electrical Research Laboratory)
- DEAL (Defence Electronics Application Laboratory)
- IOF (Indian Ordnance Factories)
- Advance Base Workshops
- ARDE
(Armament Research and Development Establishment).
- CPRI
(Central Power Research Institute) – Bangalore, Hyderabad
- DMRL (Defence Metallurgical Research Laboratory).
- Diesel Loco Sheds
- Variable Energy Cyclotron Centre
- Indian Rare Earths Limited
- IAEA
- S.A.M.E.E.R
(Society for Applied Microwave Electronics Engg. and Research)
- Devi Aleholi University, Indore
- IGCAR (India Gandhi Centre for Atomic Research), Kalpakkam.
- Saha Institute of Nuclear Physics
- IPR (Institute for Plasma Research), Gandhinagar.
- Indian Railways
- Lawrence Livermore Labs
- Los Alamos Labs
- Gull Group, University of Michigan
- General Electric Aerospace
- General Electric Medicals
- General Atomics
- Princeton University
- MTRDC
(Microwave Tube Research and Development Centre).
- Naval Bases and Air Force Units
- Beverly Hills III Associates
- Farr Research Corporation
- Larsen and Toubro (L&T)
- Nuclear Fuel Complex (NFC)
- DARE (Defence Avionics Research Laboratory).
- Telecommunication Italia – ITALY
- Tele Communication Research Institute (PIT) – Poland
- DSO National Laboratories – SINGAPORE
- Fischer and Tausche Capacitors – GERMANY
- Armstrong Transmitters – USA
- Transtech Melbourne Inc. – AUSTRALIA
- TEC – Institute fur Technische – GERMANY
- T. M. S. Limited Sti – TURKEY
- I. I. T. (Indian Institute of Technology)
Chennai, Bombay, Kharagpur, Roorke
- N. I. T (National Institute of Technology)– Surathkal
- ISRO - ISTRAC, SAC, Shri Hari Kota
- Aselsan, Turkey

Cables Varieties**Capacitor**

1. High Voltage General Purpose Capacitor	3
2. HV HF 100pF – 500nF Low Loss Capacitors	3
3. HV RF 300pF - 10000pF Capacitors	3
4. Various PFN Capacitors 40 kV DC	3
5. Flat RF 100pF – 600pF Capacitor	3
6. Rolling Stock Capacitors 500 μ F - 5000 μ F	4
7. UHV Multiplier Capacitor 100 μ F-500 μ F	4
8. HV Multiplier Capacitor 18.5nF 80kV DC	4
9. Energy Storage Capacitor 178 μ F 15kV DC	4
10. HV HF Capacitor 500pF to 10,000pF	4
11. HV DC Filter Capacitors 10kV - 50kV DC	5
12. HV Energy Storage Capacitors 10-40kV DC	5
13. HV Capacitor Module 0.5 μ F - 10 μ F for Missiles, Radars and Submarines	5
14. Low Inductance Coaxial HV Capacitor 40nF-250nF	5
15. HV Capacitor 20nF 20kV DC	5
16. HV Cylindrical Capacitor 600pF – 2000pF for Fast Charging and Discharging	6
17. HV Low Inductance Feed through 50nF–50 μ F	6
18. HV Low Pressure Feed through Vacuum Capacitor	6
19. Capacitor Bridge Wire Module 3kV DC 300V	6
20. HV Coaxial Capacitor 35 to 45kV DC	6
21. High Voltage Capacitor 0.47 μ F/1000V AC	7
22. High Voltage Capacitor 5 μ F /2kV DC	7
23. High Voltage Capacitor 10nF /7.5kV DC	7
24. High Voltage Energy Storage Capacitor 150 μ F / 5kV DC	7
25. High Voltage Capacitor 2nF/50kV DC	7
26. High Voltage Capacitor 30nF/60kV DC	8
27. High Voltage Capacitor 1.0nF/60kV DC	8
28. High Voltage PFN Capacitor 0.04 μ F/40kV DC	8
29. High Voltage Impulse Capacitor 0.04 μ F/40kV DC	8
30. High Voltage Capacitor 150nF/70kV DC	8
31. High Voltage Capacitor 10 μ F/1100 VAC	9
32. High Voltage Capacitor 0.8 μ F/50kV DC	9
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34. High Voltage Capacitor with Handles 1.8 μ F/35kV DC	9
35. High Voltage DC Capacitor 1.0 μ F/45kV DC	10
36. High Voltage Capacitor 0.5 μ F 5kV DC	10
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CAPACITOR

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41. High Voltage Capacitor 2000PF/40kV DC	11
42. High Voltage HT Capacitor 2 μ F/6kV DC	11
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44. High Voltage Feed through Capacitor 1 μ F 3kV DC	11
45. High Voltage High Current Capacitor 100 μ F 800V DC	12
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47. High Voltage High Altitude Capacitor 1 μ F 50kV DC	12
48. High Voltage High Altitude Capacitor 5 μ F 20kV DC	12
49. High Voltage Energy Storage Capacitor 50 μ F 10kV DC	13
50. High Voltage Energy Storage Capacitor 50 μ F 12kV DC	13
51. High Voltage High Altitude Capacitor 0.5 μ F 50kV DC	13
52. High Voltage Capacitor 10 μ F/600V DC	13
53. High Voltage Energy Storage capacitor 4 μ F 10V DC	13
54. High Voltage Capacitor 250pF	14
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56. 5000pF Capacitors 500pF 25kV DC	14
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58. High Voltage High Energy Capacitor 65kV DC	14

RAIL WAY CAPACITORS

59. Capacitor 15 μ F/600V AC	15
60. Capacitor 1 μ F/2kV AC	15
61. Capacitor 1.5 μ F/2000V DC	15
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65. Capacitor 25 μ F/560V AC	16
66. Capacitor 1.5 μ F/2.0kV AC	16
67. Capacitor 12 μ F/400V AC	16
68. Capacitor 30 μ F 370V AC	16
69. 16 μ FD Capacitor 500V AC	17
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21. High Voltage TWT HT Cable	23
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26. High Voltage Connector Block 40kV DC (5 in 1)	24
27. Pulse Electromagnetic Cable Healing Chord	24
28. High Voltage Multi- Pin Connectors 40kV DC to 150kV DC	25
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DIODE

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14. High Voltage High Altitude Diode 300kA 0.3A	28
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20. Cylindrical High Voltage Diode 10kV/1A	30
21. High Voltage Diode Various 50kV DC to 200kV DC	30
22. High Voltage High Frequency Diode – Various	30
23. High Voltage Diode Resistor Module 40kV/75 Ohms	30
24. High Voltage Power Diode 130kV -200kV 1A	30

1. High Voltage 60kV Pulse Compensated Divider	31
2. High Voltage 125kV Resistive Divider	31
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STANDARD CABLES AVAILABLE

Sl No	Voltage	Current	Diameter	Colour
1	2kV	6A	6.5mm	White
2	6kV	2A	3.5mm	White
3	6kV	2A	3.5mm	Blue
4	6kV	2A	3.5mm	Orange
5	6kV	2A	3.5mm	Grey
6	10kV	5A	4.0mm	Light grey
7	15kV	2A	4.0mm	White
8	20kV	5A	5.5mm	White
9	25kV	10A	11mm	White
10	25kV	30A	29mm	Red
11	30kV	3A	5.0mm	White
12	30kV	6A	7.5mm	Blue
13	30kV	3A	6.5mm	White
14	35kV	2A	5.6mm	White
15	40kV	0.5A	6.0mm	White
16	40kV	8A	6.0mm	Light Grey
17	40kV	15A	6.5mm	White
18	40kV	3A	7.0mm	White
19	40kV	6A	7.5mm	White
20	40kV	10A	8.0mm	Blue
21	40kV	15A	9.5mm	Red
22	40kV	10A	9.0mm	Red
23	40kV	10A	9.0mm	Yellow
24	40kV	10A	9.0mm	Red
25	50kV	10A	9.5mm	White
26	50kV	20A	11.0mm	Black and white
27	50kV	20A	12.0mm	Black and White
28	50kV	20A	10.5mm	Black and White

Cables

Sl No	Voltage	Current	Diameter	Colour
29	60kV	10A	10.8mm	Black and White
30	60kV	3A	10.0mm	Red
31	60kV	70A	18.5mm	White
32	60kV	20A	11.0mm	Black and White
33	60kV	15A	11.0mm	Black and White
34	70kV	10A	11.0mm	White and Black
35	70kV	20A	12.5mm	Black and white
36	70kV	20A	11.0mm	Black and white
37	80kV	25A	17.0mm	White and Black
38	80kV	40A	18.0mm	White
39	80kV	30A	16.0mm	White
40	80kV	30A	16.0mm	White and Black
41	80kV	20A	16.5mm	White
42	80kV	30A	18.0mm	White
43	90kV	2A	14.0mm	White
44	90kV	25A	17.0mm	Black and White
45	90kV	5A	19.5mm	Red
46	100kV	1A	16.0mm	White
47	100kV	30A	16.0mm	Black and white
48	100kV	25A	22.5mm	Red and white
49	100kV	22A	16.0mm	Black and White
50	100kV	1A	16.0mm	White
51	120kV	50A	19.5mm	Red
52	133kV	0.27A	17.5mm	White
53	200kV	65A	34.5mm	White and Black
54	200kV	25A	24.0mm	White
55	200kV	50A	24.5mm	Red

Please Mention Your Actual Requirement and We can design the cable for the same

Capacitors

1. High Voltage General Purpose Capacitors

Operating Voltage : 2kV to 200kV AC or 1kV to 400kV DC
Capacitance : 100pF to 100 μ F
Application : Filter, THD, Traction, RF, By pass
Please enquire for your actual requirement



2. HV HF 100pF – 500nF Low Loss Capacitors



Item : High Voltage Capacitors
Capacitance : 100pF \pm 10% to 500nF \pm 10%
Dielectric : Teflon, Polyamides, PP, Mica
Voltage Range : 1kV to 25kV DC
Type No. : S/18/7

3. HV RF 300pF - 10000pF Capacitors

Capacitance : 300pF to 10000pF
rms current : Continuous current typically 100A to 900A
Typical Frequency : 100 MHz
Typical Inductance : 100nH
Temperature : -20°C to +120°C
Application : For high power sources, Magnetron, Thyatron, Gyatron and similar applications where large current radio frequency capacitors are essential.
Type No. : S/15/95 (897)



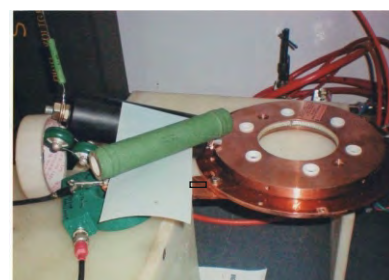
4. Various PFN Capacitors 40kV DC



Working Voltage : 40kV DC
Capacitance Value : Customisation available
Max peak current : 100 Amperes
Temperature : -30°C to +120°C
Application : PFN based systems
Type No. : S/14/54, S/16/118, S/17/140, S/17/151

5. Flat RF 100pF – 600pF Capacitor

Working Voltage : 5kV DC
Typical Capacitance : 100pF to 600pF
Typical rms Current : 50A to 130A at 100 MHz
Type No. : Z/RF/100-600/AMJI



Capacitors

6. Rolling Stock Capacitor 500 μ F-5000 μ F

Operating Voltage : 600V/800V/1300V/2200V DC
Capacitance : 500 μ F/800 μ F/1200 μ F/2200 μ F/5000 μ F
rms Current : Typically 250A to 1800A typical repetitive
Peak Current : 5kA to 20kA
Applications : Rolling Stock Railways
Type No. : S/13/40



7. UHV Multiplier Capacitors 100nF - 500nF



Voltages : 150kV DC/200kV DC/250kV DC/200kV AC
Capacitance : 100nF /200nF /300nF /400nF /500nF
Tolerance : $\pm 10\%$
Dielectric : Metal film foil, Metallized foil, Paper oil
Dimension of : Dia = 450-600mm; H = 1000-1500mm
Type No. : S/16/64 (968)

8. High Voltage Multiplier Capacitor 18.5nF 80kV DC

Capacitance : 18.5nF
Working Voltage : 80 kV DC
Test Voltage : 90 kV DC
Dissipation on Factor : ≤ 0.001 at 1kHz
Operating Frequency : Maximum 30kHz
Dimensions : L=180mm; W=123mm; H=85mm
Fitment : Bottom Insulator Threaded M8
Temperature : Minimum -20 $^{\circ}$ C ; Maximum 85 $^{\circ}$ C
Type No : S/18/122 (4561)



9. Energy Storage Capacitor 178 μ F 15kV DC



Capacitance : 178 μ F $\pm 15\%$
Working Voltage : 15 kV DC
Test Voltage : 18 kV DC (1 Minute)
Total Energy at Rated Voltage : 20kJ $\pm 10\%$
Maximum Discharge Peak Current : 200kA
Voltage Reversal : $\geq 80\%$
Internal Inductance : < 40 nH
Rated time on Charge : ≥ 1 minute
Type No : S/20/12

10. High Voltage HF Capacitor 500pF to 10,000pF

Capacitance : 500pF to 10,000pF
Frequency : 1kHz to 100kHz
Application : Inverter and Resonant Circuit
Voltage : 5kV to 100kV
Max Current : ≈ 100 A rms
Type No : S/20/48 Series



Capacitors

11. HV DC Filter Capacitors 10kV - 50kV DC

Working voltage : 10/18/25/30/50kV DC
Capacitance : Different Values Available
Type : Metal film Foil Oil-Filled Type
Container : Metal/Fiberglass/SS/Polypropylene
Type No. : S/16/70



12. HV Energy Storage Capacitors 10-40kV DC



Working voltage : 10kV /20kV /30kV /40kV DC
Test Voltage : 11kV /22kV /33kV /44kV DC
Capacitance : 5 μ F/10 μ F/14.5 μ F
Tolerance : \pm 10%
Peak current : 100kA
Type No : S/14/66

13. HV Capacitor Module 0.5 μ F - 10 μ F for Missiles, Radars and Submarines

Capacitance : 0.5 μ F to 10 μ F
Working voltage : 50kV DC
Test voltage : 70kV DC (1 minute)
Application : Radar TWT, Missiles, Submarines & Energization for Power Modulators
Type No. : S/15/104, S/15/105



14. Low Inductance Coaxial HV Capacitor 40nF-250nF



Working Voltage : Various Working Voltage Options Available
Capacitance Value : 40nF/100nF/250nF
Peak Current : 10kA
Type : Coaxial Capacitor
Enclosure : Mild Steel / Stainless Steel
Insulation : Ceramic Polymer Material
Type No. : S/16/50 (931)

15. High Voltage Capacitor 20nF 20kV DC

Capacitance : 20nF \pm 5%
Voltage (working) : 20kV DC
Test Voltage : 30kV DC (1 Minute)
Inductance : \leq 50 n H
Type : S/15/129 (Y-910)



Capacitors

16. HV Cylindrical Capacitor 600pF – 2000pF for Fast Charging and Discharging

Working voltage : 30 kV DC
Capacitance : 600pF – 2000pF \pm 10%
Test Voltage : 36 kV DC
Application : For Fast Charging and Discharging
Type No. : S/16/6 (924)



17. HV Low Inductance Feed Through 50nF–50 μ F



Current : 100A, 200A, 300A, 500A, 800A, 1000A
Capacitance : 50nF, 100nF, 250nF, 500nF, 2 μ F
Voltage : 1kV/2kV/3kV/4kV DC/5kV/10kV
Type No : S/19/99, S/19/64

18. HV Low Pressure Feed Through Vacuum Capacitor

Working Voltage : 50kV to 70kV
Max Current : 10A rms and 60kA Peak
Max Pressure Vacuum : Typically 10⁻³ Vacuum 1Millibar or 250 psi
Material : Stainless Steel + Ceramic
Temperature : -30°C to 100°C
Type : Polymer Stainless steel
Type No. : ZHS/001/068



19. Capacitor Bridge Wire Module 3kV DC 300V



Input Voltage : 3kV DC
Input Command : 300 Voltage Trigger Pulse
Application : Detonation of Bridge Wire, Squibs, Detonation Set.
Layout : The Module Consists of a Slapper Capacitor, Slapper Flat Ordnance, Spark Gap Trigger Mechanism
Energy : 50nF/100nF/250nF at 5kV/10kV
Type No. : ZHS/001/101

20. High Voltage Coaxial Capacitor 35 to 45kV DC

Working voltage : 35 kV / 40 kV / 45 kV DC
Typical Values : 10pF / 34pF / 45pF / 56pF
Tolerance : \pm 20%
Frequency : 5 kHz to 500 kHz
Typical Frequency : 8 kHz
Insulation : PTFE & Oil
Temperature (Max) : 105°C
Application : PFN Circuit
Type No : S/18/126



Capacitors

21. High Voltage Capacitors 0.47 μ F/1000V AC

Capacitance : 0.47 μ F \pm 10%
Working Voltage : 1000 V AC
Test Voltage : 2000 V DC
Type No : S/19/166



22. High Voltage Capacitor 5 μ F/2kV DC



Capacitance : 5 μ F \pm 10%
Working Voltage : 2kV DC
Test Voltage : 3.0kV DC
Type No : S/20/24

23. High Voltage Capacitor 10nF/7.5kV DC

Capacitance : 10nF \pm 10%
Working Voltage : 7.5kV DC
Testing Voltage : 10.0kV DC
Type No : S/18/1



24. High Voltage Energy Storage Capacitor 150 μ F/5kV DC



Capacitance : 150 μ F \pm 10%
Working Voltage : 5kV DC
Test Voltage : 5.5kV DC
Isolation Voltage : 7.5kV DC
Voltage Reversal : Maximum 20%
1 Peak : 7.5kA Maximum
Type No : S/14/102

25. High Voltage Capacitor 2nF/50kV DC

Capacitance : 2nF \pm 10%
Working Voltage : 50kV DC
Test Voltage : 150kV DC
PRR : 200Hz at 50kV
Type No : S/18/87 (1083)



Capacitors

26. High Voltage Capacitor 30nF/60kV DC

Capacitance : 30nF \pm 10%
Working Voltage : 60kV DC
Test Voltage : 90kV DC (1 Minute)
Type No : S/16/139 (976)



27. High Voltage Capacitor 1.0nF/60kV DC



Capacitance : 1.0nF \pm 10%
Working Voltage : 60kV DC
Carrier : 5 kHz on Top
Type No : S/20/55

28. High Voltage PFN Capacitor 0.04 μ F/40kV DC

Capacitance : 0.04 μ F \pm 5%
WKG Voltage : 40kV DC \pm 20% Reversal
1 Peak : 3kA Maximum
PRF : Maximum 415 pps
Type No : S/14/54



29. High Voltage Impulse Capacitor 0.04 μ F/40kV DC



Capacitance : 0.04micro farad (40nF)
Working Voltage : 40kV DC
Test Voltage : 50 kV DC
Project : 10/45 Marx
Type No : WK BK 07/PG-11

30. High Voltage Capacitor 150nF/70kV DC

Capacitance : 150nF to 600nF
Working Voltage : 70kV DC
Test Voltage : 80kV DC
I Peak : \approx 2kA
Application : Filter of Supplier
Type No : S/20/150



Capacitors

31. High Voltage Capacitor 10 μ F/1100kV DC

Capacitance	: 10 μ F \pm 10%
Working voltage	: 1100V AC
Test voltage	: 2000V DC
T-Body Isolation	: 3000V DC
Max Temperature	: 85 $^{\circ}$ C
Minimum Temperature	: -55 $^{\circ}$ C
Duty	: Continuous
Dielectric	: Mixed
Container	: Mild Steel
Dissipation Factor	: \leq 0.001
Type No	: S/20/160



32. High Voltage Capacitor 0.8 μ F/50kV DC

Capacitance	: 0.8 μ F + 0.8 μ F
Voltage	: 50kV DC + 50kV DC
Test Voltage	: 100kV DC total
Voltage Reversal	: \pm 20%
Mounting	: Vertical
Material	: FR4 (FRP)
Type	: Aluminium Can Oil Immersed
Dim. Tolerances	: All \pm 3.5mm
Weight	: \approx 45kg
I _{peak}	: 50kA/Capacitor
PRR	: Max. 1pps or Max 10pps at 25kA
Inductance	: \approx 150nH or Lesser
Operating Temperature	: 0 $^{\circ}$ C to 50 $^{\circ}$ C
Type No	: S/20/90



33. Pulse Forming Network Capacitor 750pF 1kA



Capacitance	: 750pF, 1000pF, 2000pF
Tolerance	: \pm 20%
Peak Current	: 1kA
PRR	: Max 30kHz
Dissipation Factor	: \leq 0.001 at 10kHz
Suggested Frequency	: 20kHz, Max 30kHz
Voltage	: 10kV, 20kV, 50kV, 80kV
Type No	: S/20/138

34. High Voltage Capacitor with Handles 1.8 μ F 35kV DC

Capacitance	: 1.8 μ F \pm 10%
Working Voltage	: 35kV DC
Test Voltage	: 55kV DC
Weight	: 33kg
Type No	: S/20/122



Capacitors

35. High Voltage DC Capacitor 1.0 μ F + 0.5 μ F 45kV DC



Capacitance : 1.0 μ F + 0.5 μ F
Working Voltage : 45kV DC
Test Voltage : 66kV DC
Type No : S/20/110/111

36. High Voltage Capacitor 0.5 μ F 5kV DC

Working Voltage : 5kV DC
Test Voltage : 7kV DC
Temperature : -20° C to + 55° C
Type No : S/20/103



37. High Voltage Capacitor 20nF 12kV AC



Capacitance : 20nF \pm 10
Working Voltage : 12kV AC + 35kV DC
Test Voltage : 35kV DC
Max Current : 50A
Type No : S/20/98

38. High Voltage Capacitor 18.5nF 90kV DC

Capacitance : 18.5nF \pm 10%
Working Voltage : 90kV DC
Test Voltage : 135kV DC
Typical Frequency of Operation : 20 kHz
Maximum RMS Current : 12A
Maximum Peak Current : 3kA
Application : High Voltage High-End Multipliers
Termination : M6/M10 Brass Bolt
Type No : Z/20/74



39. High Voltage Multiplier Capacitor 0.4 μ F 8kV DC



Capacitance : 0.4 μ F \pm 10%
Working Voltage : 8kV DC
Test Voltage : 10kV DC
Operating Current : Typically 5kA Maximum
Temperature : -40° to +55°
Type No : S/20/7

Capacitors

40. High Voltage Capacitor 8 μ F 6kV DC

Capacitance : 8 μ F \pm 10%
Working Voltage : 6kV DC
Type No : S/20/59



41. High Voltage Capacitor 2000pF 40kV DC



Capacitance : 2000pF \pm 10%
Working Voltage : 40kV DC
Type No : S/19/123

42. High Voltage H.T. Capacitor 2 μ F 6kV DC

Capacitance : 2 μ F, +20%, -10%
Max Working Voltage : 6kV DC
Operating Temperature : -40 $^{\circ}$ C to +90 $^{\circ}$ C
Test Voltage : 10,000V DC (1 Minute)



43. High Voltage High Frequency Capacitor 110nF 1000A



Capacitance : 0.11 μ F \pm 10%
I Peak : 1000 A (Fault Current)
I Peak (Rep) : 100A @ 6 kHz
PRR : 6 to 9 kHz
Type No : S/14/85

44. High Voltage Feed Through Capacitor 1 μ F 3kV DC



Capacitance : 1 μ F \pm 10%
WKG Voltage : 3000V DC
I Peak : 40A to 70A
Type No : Z/46/50

Capacitors

45. High Voltage High Current Capacitor 100 μ F 800V DC

Rated DC Voltage Min	: 800V DC
Rated DC Voltage Max	: 1200V DC
Capacitance	: 100 μ F
Technology	: Metalized Polypropylene Film, Self Healing
Dielectric Dissipation Factor	: $< 2 \times 10^{-4}$
Peak Current	: 1kA (Surge) Max at 1kHz 3.0kA
Termination	: M8 X 8 Brass
Operating Temperature Min	: -40°C to 85°C
Casing	: Polyacetal
Filling	: Dry Resin
Type No	: Y-1229



46. Ultra-Capacitor Stackable Modules 180F 48V



Capacitance	: 165 to 180 Farad $\pm 10\%$
Working Voltage	: 48 Volts DC
Energy	: 20 Kilo Joules
Weight	: ≈ 14 to 16 Kg
Dimension	: L=420mm x W=190mm H=155mm
Type	: S/20/180

47. High Voltage High Altitude Capacitor 1 μ F 50kV DC

Working voltage	: 50kV DC
Capacitance	: 55kV DC
Dissipation factor	: ≤ 0.01 at 1 khz
Altitude	: ≥ 9100 Meters Above Sea Level
Type no	: S/20/144



48. High Voltage High Altitude Capacitor 5 μ F 20kV DC



Working Voltage	: 20kV DC
Test Voltage	: 25kV DC
Capacitor	: 1 μ F/5 μ F
Altitude	: 6000 meter above sea level
Type	: S/20/173; S/20/172
Temperature	: -30°C to +85°C
Dimension – 5 μ F	: H=355mm x L=440mm x W=125mm
1 μ F	: H=203mm x L=230mm x W=125mm

Capacitors

49. High Voltage Energy Storage Capacitor 50 μ F 10kV DC

Capacitance	: 50 μ F
Tolerance	: \pm 10%
Working Voltage	: 10kV DC
Test Voltage	: 12kV DC
IPK	: 5kA MAX
Voltage Reversal	: Max 20%
Weight (Approx)	: 40kg
Dimensions (W x D x H)	: 340 x 250 x 400mm
Type No	: S/16/146/A



50. High Voltage Energy Storage Capacitor 50 μ F 12kV DC



Capacitance	: 50 μ F
Tolerance	: \pm 10%
Working Voltage	: 12kV DC
Test Voltage	: 14kV DC
Ipk	: 5kA MAX
Voltage Reversal	: Max 20%
Weight (Approx)	: 45kg
Dimensions (W x D x H)	: 295 x 230 x 520mm
Type No	: S/20/106/A

51. High Voltage High Altitude Capacitor 0.5 μ F 50kV DC

Capacitance	: 0.5 μ F \pm 10%
Working Voltage	: 50kV DC
Test Voltage	: 55kV DC
Type No	: S/20/40
Dimension	: L=530 x B=150 x H=340



52. High Voltage Capacitor 10 μ F 600V DC



Capacitance	: 10 μ F \pm 10%
Working Voltage	: 600V AC 50Hz/400Hz
Test Voltage	: 900V AC 50Hz/400Hz
Application	: Power Factor Correction at HF
Type	: S/20/160

53. High Voltage Energy Storage Capacitor 4 μ F 10V DC

Capacitance	: 4 μ F \pm 10%
Working Voltage	: 10kV DC
Test Voltage	: 12kV DC
I Peak	: 10kA
PRR	: 1 ppm
Type No	: S/20/33



Capacitors

54. High Voltage Capacitor 250pF

Capacitance : 250pf \pm 10%
WKG Voltage : 40kV Pulse
Type No : S/17/65



55. High Rep Rate 10nF-500nF Energy Storage Capacitor



Capacitance : 10nF to 500nF
Working Voltage : 50kV, 60kV, 80kV, 100kV
Test Voltage : 60kV, 70kV, 90kV, 110kV
PRR : Max 100pps at 0.8kA, Max 5pps at 5.0kA
Type No : S/19/62 (Compact)

56. 5000 pF Capacitors 25kV DC

Capacitance : 5000 pF
Tolerance : \pm 10%
Working voltage : 25 kV DC
Test voltage : 32.5 kV DC
I peak : 200A
Maximum Frequency : 25 kHz
Type No : Z/20/52



57. High Voltage Capacitor 65μF 1100V DC



Capacitance : 65μF \pm 10%
Working Voltage : 1100V DC
Test Voltage : 1375V DC
Peak Current : 80A rms Maximum
Temperature : - 40° C to 105° C
Type No : S/14/20

58. High Voltage High Energy Capacitor 10μF 65kV DC

Capacitance : 10μF
Working Voltage : 65kV DC
Test Voltage : 75kV DC
Energy : 20kJ
Peak Current : 150kA
Film : Film Foil K Film
Dimension : L=660mm B=590mm H=500mm
Weight : 180kg
Type No : S/20/122



Rail way Capacitors

59. Capacitor 15 μ F 600V AC

Capacitance : 15 μ F
Working voltage : 600 V AC 50Hz
Test voltage : 800 V AC 50Hz
T-Body Isolation : 2500V DC
Type No : S/15/148 (912) Drg No: 2133



60. Capacitor 1 μ F 2kV AC



Capacitance : 1 μ F
Working voltage : 2 kV AC
Test voltage : 3KV DC T-T (1 Minute)
T-Body Isolation : 4000V DC
Type NO : S/15/71 (879)

61. Capacitor 1.5 μ F 2000V DC

Capacitance : 1.5 μ F
Working voltage : 2000V DC
Test voltage : 3000V DC
T-Body Isolation : 3000V DC
Type No : S/14/159



62. Capacitor 1 μ F 800V DC



Capacitance : 1 μ F
Working voltage : 800V AC
Test voltage : 2500V DC (T-T)
T-Body Isolation : 4000V DC (T-B)
Type No : S/14/112 (841)

63. Capacitor 2 μ F 1.2kV AC

Capacitance : 2 μ F
Working voltage : 1.2 kV AC
Test voltage : 4.8kv DC
T-Body Isolation : 6.0kV DC
Type No : S/13/06 (598)



Rail Way Capacitors

64. Capacitor 100 μ F 800V DC



Capacitance : 100 μ F
Working voltage : 800V DC
Test voltage : 1100V DC
T-Body Isolation : 1200V DC
Type No : DRG NO : 2414

65 . Capacitor 25 μ F 560V AC

Capacitance : 25 μ F
Working voltage : 560V AC
Test voltage : 1.5kVPK
T-Body Isolation : 1200V DC
Type No : S/16/75
Drawing NO : 2785/1030



66. Capacitor 1.5 μ F 2.0kV AC



Capacitance : 1.5 μ F
Working voltage : 2.0kV AC
Test voltage : 3.0kV DC
T-Body Isolation : 6.0kV DC
Type No : S/14/152 TO 155

67. Capacitor 12 μ F 400V AC

Capacitance : 12 μ F
Working voltage : 400V AC
Test voltage : 1200V DC
T-Body Isolation : 2200V DC
Type No : DRG NO : 5114 /A



68. Capacitor 30 μ F 370V AC



Capacitance : 30 μ F
Working voltage : 370 V AC
Test voltage : 1200V DC
T-Body Isolation : 1.2kV DC

Rail way Capacitors

69. 16 μ F Capacitor 500V AC

Capacitance : 16 μ F
Working voltage : 500V AC /1200V DC
Test voltage : 2400V DC
T-Body Isolation : 1600V DC
Type No : S/19/103



70. Capacitor 0.47 μ F 1000V AC



Capacitance : 0.47 μ F
Working voltage : 1000V AC
Test voltage : 2000V DC
T-Body Isolation : 3000V DV
Type No : S/19/166

71. Capacitor 0.47 μ F 2.0kV AC

Capacitance : 0.47 μ F
Working voltage : 2.0kV AC
Test voltage : 2.5kV AC
T-Body Isolation : 3.5 KV DC(T.B)
Type No : S/15/125, S/12/70 (670)



72. Capacitor 1.0 μ F 900V AC



Capacitance : 1.0 μ F
Working voltage : 900V AC
Test voltage : 1150V AC
T-Body Isolation : 2.6kV AC
Type No : S/19/133

73. Capacitor 0.47 μ F 2000V AC

Capacitance : 0.47 μ F
Working voltage : 2000V AC
Test voltage : 3000V DC
T-Body Isolation : 4000V DC
Type No : S/19/56 (Oval Type)
DRG NO : 5129



Rail Way Capacitors

74. Capacitor 288 μ F

Capacitance : 288 μ F
Working voltage : 500 VAC 50HZ
Test voltage : 3kV DC (T to T)
T-Body Isolation : 3kV DC
Type No : S/19/24



75. Capacitor 25 μ F 500V AC



Capacitance : 25 μ F
Working voltage : 500V AC/800V DC
Type No : S/13/130 (770)

76. Capacitor 0.68 μ F 2kVAC

Capacitance : 0.68 μ F
Working voltage : 2kV AC
Test voltage : 4.5kV DC
T-Body Isolation : 4.5kV DC
Type No : S/18/175



77. Capacitor 10 μ F 600V AC



Capacitance : 10 μ F
Working voltage : 600V AC
Test voltage : 900V AC
T-Body Isolation : 2.5kV DC
Type No : S/15/52

78. Capacitor 25 μ F 660V AC

Capacitance : 25 μ F
Working Voltage : 660V AC \pm 5%
Test Voltage : 2.0kV DC (T to T)
T- Body Isolation : 3.0kV DC
Type No : S/19/32



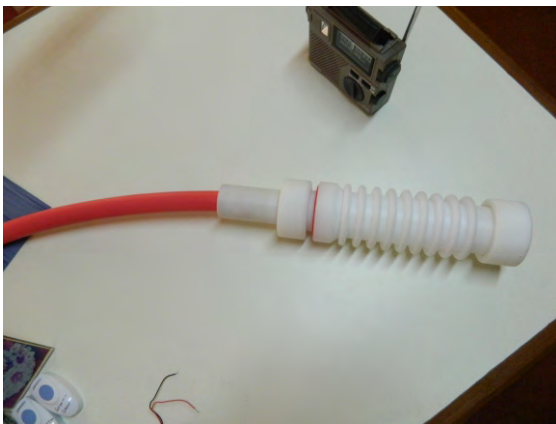
Connectors

1. High Voltage 2 Pin Connector 25kV DC

Voltage : 25 kV DC
Current : 10 Amps
Connector : Two Pin encapsulated
RH : 95% at 40° C
Altitude : 50 kms above sea level



2. HV 180kV DC Connector and Cable



Working voltage : 150kV / 180kV / 220kV / 350kV / 500kV DC
Peak current : 10kA
Max current : 50 Amps continuous
Pulse Power : 9GW
Connection : Single pin
Cable : Silicone cable
Type : Metal mountable (Panel type)
Type No. : ZHS/01/50

3. High Voltage Gas Mountable Connector

Max Voltage : 60kV DC
Working Voltage : 50kV DC
Current : 10A continuous
No. of ports : 1/2/3
Pressure : 25psi, 50psi, 100psi
Gas : N₂, SF₆, Argon, Air
Type No. : Z/34/167



4. High Voltage DC + Pulse Connector



Max Voltage : 40kV DC + Pulse voltage 30kV pulse
Max DC Isolation : 60kV DC
Pressure : 25psi, 50psi, 100psi
Gas : N₂, SF₆, Argon, Air
Type No. : Z/34/166

Connectors

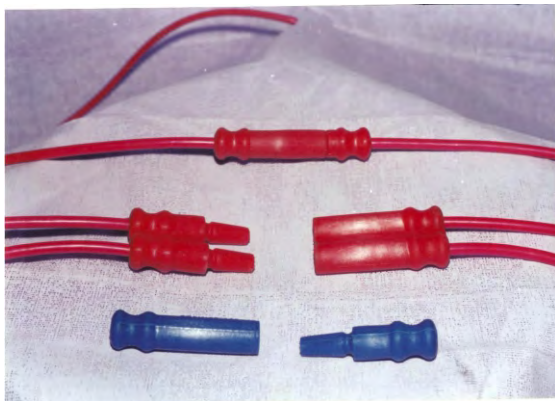
5. High Voltage Connectors

The connector comes with a high voltage cable on the male part of 2m length and a 1m cable on the female part, the female connector is fixed on a Non-metallic panel surface and the male plug has a Solid HV cable vacuum moulded in the connector.

Type : HVC – 100/150/200
Working voltage : 80kV DC
Current : 20 Amps or as per requirement
Test voltage : 100kV DC / 50kV AC
Diameter : 50mm
Length : 250mm
Type No. : ZHS/001/071



6. High Voltage Inline Connectors 20kV DC



The connector comes Soldered and moulded with silicone wires in 25kV DC wire with 2 meters length.
Working voltage : 20kV DC, 25kV DC
Operating current : Typically 10A continuous, 1kA Pulsed current.
Material : Silicone sizes 001, 002, 003, 004
Type : Connector inline to join two HV wires in air
Types Available : Single pin, double pin, Four in one
Type No. : ZHS/001/072

7. High Voltage 150kV Distribution Connector

Max Current : 25A (rms)
Peak Current : 10kA
Connectors used : HVC – 100, HVC – 150
Max cable diameter : 19mm
Temperature : 20°C to +85°C
Type No. : Z/29/37



8. High Voltage Miniature Connector Air Borne

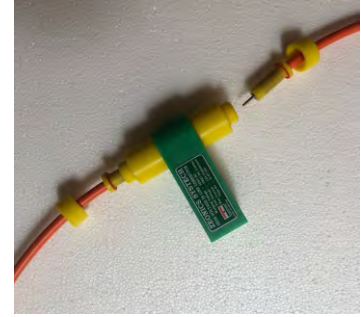


Working Voltage : 3kV/5kV/10kV DC
Test Voltage : 5kV/10kV/20kV DC
Current : 1A/3A/5A
No of ways : 5, 8, 10, 12
Type No. : Z/41/82

Connector

9. High Voltage Inline Connector 50kV DC

Working Voltage : 50kV DC
Test Voltage : 70kV DC (1Min)
Altitude : 9100mt above level
Type No : Z/47/50



10. High Voltage High Altitude Connector 50kV Blocks



Working Voltage : 50kV DC at 10A
Test Voltage : 70kV DC
Altitude : 9100 meter above sea level
Temperature : -30°C to +55°C
Rh : 90% at 40°C
No of ways : 4 in one / 6 in one / 10 in one
Type No : Z/46/7

11. High Voltage High Frequency Connector 30kV 20A

Working Voltage : Max 30kV AC
Current : Max 20A
Frequency : 50Hz - 100kHz
Model : Panel Type (Metal)
Type No : Z/48/109



12. High Voltage Axial Connector 45kV DC



Working Voltage : 45kV DC
Test Voltage : 60kV DC
Isolation : 45kV DC
Type No : Z/24/74

13. High Voltage High Altitude Connector 50kV DC

Working Voltage : 50kV DC at 10A
Test Voltage : 60kV DC
Altitude : 9100 meter above sea level
Temperature : -30 °C to +55 °C
Rh : 90% at 40C
No of ways : 4 in one / 6 in one / 10 in one
Type No : Z/46/69



Connector

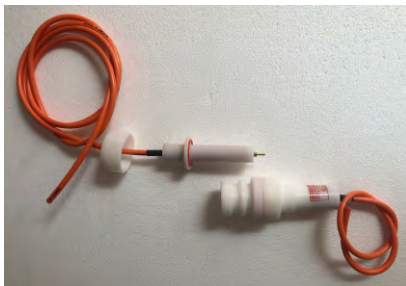
14. High Voltage Series of Connector

Basic Body	: Insulated FRP Fitment
Air clearance near Connector	: 1800mm Minimum
Working voltage	: In Air 500 kV DC In Metal Container Top – 120 kV DC
Maximum current	: Peak current 20kA (20msec) : Average Current 24 Amps
Temperature	: -20°C to +85°C
Cable	: Silicone HVC -500 Series 48mm Diameter
Type	: Z/45/101



15. DC + AC High Voltage Connectors (HVC – 50)

Working Voltage	: 50 kV DC , 35 kV AC
Maximum Current	: 10 Amps
Peak Current	: 2 kA / 20 msec
Panel hole diameter	: 40 mm ± 1 mm
Panel Thickness	: Maximum 12 mm
Wire Length	: >1 meter, maximum 20 meters
Maximum Frequency	: 30 kHz at 21 kV AC rms
Type of Gasket	: Silicone Applied Silicone RTV (Before Fixing : Hand Tight)
Type No.	: Z/46/38 (Drg. No. 5336) Plug & Female Socket System



16. DC + AC High Voltage Connectors (HVC – 50)

Working Voltage	: 50kV DC , 35kV AC
Maximum Current	: 10 Amps
Peak Current	: 2kA / 20 msec
Panel hole diameter	: 60 mm ± 1 mm
Panel Thickness	: Maximum 12 mm
Wire Length	: >2 Meters, Maximum 20 Meters
Maximum Frequency	: 30kHz at 35kV AC rms
Type of Gasket	: Silicone Applied Silicone RTV (Before Fixing : Hand Tight)
Type No.	: Z/46/39 (Drg. No. 5337) Plug & Female Socket System



17. High Voltage Connector Various Versions



Working Voltage	: 10kV to 500kV DC : 6kV to 180kV AC
Test Voltage Models	: 20% Higher, Output Voltage in Average kV : 10kV/20kV/40kV/60kV/100kV : 150kV/250kV/500kV

Connector

18. High Voltage 60kV Cables For Electron Gun Assembly

Working Voltage : 60kV DC
Max Current : 50A
Cable : XLPE Braided
Connector : Silicone Moulded Ends
Electron x Beam Acceleration
Type No : Z/50/38



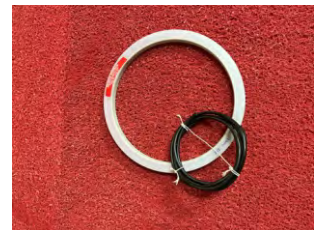
19. High Voltage Isolated Light Connector



Wave Length : 650nm to 1550nm
Working Voltage : 100kV Isolation
Fibre Optic : Yes
Type No : Z/48/36

20. Low Voltage Metal Detector Coil

Resonant Frequency : 15 to 12kHz
Diameter : 300mm
Base : Copolymer
Type No : Z/50/74



21. High Voltage TWT HT Cable



Working Voltage : 8kV DC Pulse
Test Voltage : 15kV DC
Application : For Radar HV DC
Power Supply Modulator
Type No : Z/44/8/2

22. High Voltage Connector 8kV DC 10A

Working Voltage : 8kV DC
Max Current : 10Amp
Pulse Voltage : 15kV Max
Type No : Z/44/37



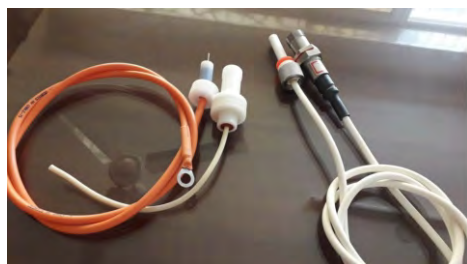
Connector

23. High Voltage Connector 2 Pin 25kV 10A

Voltage :25kV (2pin)
Current : 10A
Hermitically sealed set
Temperature : -20°C to +85°C
Altitude : 50k V for 25kV
Type No : AMJI/2A/25/2



24. Rugged Panel Mount Connectors Primary & Coaxial



Operating voltage : 30 kV DC max
Primary Voltage : 60 kV DC max
Operating current : 10A
Minimum Temperature : - 20°C
Maximum Temperature : + 55°C
Suitable cable : RG213/ RG8U/HVC – HVC – 60/HVC- 40

25. High Voltage Connector 50kV DC 20A

Working Voltage : 50kV DC
Test Voltage : 65kV DC (1min)
Current : 20A Continuous
Peak Current : 2kA
Altitude : 4500 meters above sea level
Temperature : -30°C to +85°C
Wire : XLPE Cable 10mm Max 60KV Capacity
Type No : Z/48/103



26. High Voltage Connector Block 40kV DC (5 in 1)



Working voltage : 40kV DC
Test Voltage : 45kV DC
Project : RTC – 3000 (C)
Type No : Z/29/154 (5T) (5 In One)

27. Pulse Electro Magnetic Cables “Healing Cord”



High Voltage : 3kV to 6kV Pulse
High Current : Max 10kA
Combination : Loop, Solenoid , Coil Linear
Compatible System : Z/44/136
Type No : Z/47/15

Connectors

28. High Voltage Multi-pin Connectors 40kV DC to 150kV DC

Voltage : 40kV/60kV/100kV/150kV DC
Current : 20A/40A/60A
Peak Current : 2kA/5kA/10kA
Type No. : Z/29/154



29. Inline HV Distribution Blocks 20kV DC to 100kV DC



Working Voltage : 20kV/ 30kV /40kV/ 60kV / 80kV / 100kV DC
Current : 2A/5A/20A
No of Ways : 6, 8, 12, 22
Type No. : Z/36/31

30. HV Feed Through Terminal Connector 5kV DC to 150kV DC

Working Voltage : 5kV to 150kV DC
Max Current : 30A
Temperature : -20°C to +100°C
Type : Polymer Material Type
Termination : All metric threads Available
Application : To Extract High Voltage from Metal Surface
Max pressure : 100psi in oil or SF₆
Type No. : ZHS/001/069



31. High Voltage Open & Sealed Connector 20kV DC

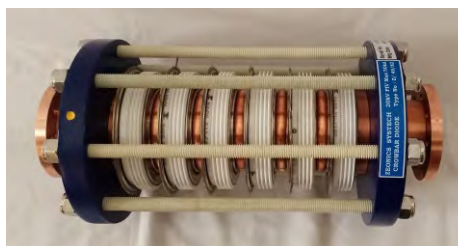


Working voltage : 20kV DC
Test voltage : 30kV DC
Current : 5A / 10A/ 20A
Type No. : Z/36/32

Diode

1. HV Oil Immersed Diode Assemblies

Forward current : 1000A / 2000A continuous
Peak Current : 50kA/100kA for 20ms maximum
PIV : 6kV / 10kV/ 30kV/ 50kV DC
Type No. : Z/33/220



2. HV Oil Filled Compact Diode 100kV 10mA



PIV : 100kV
Forward Current : 10mA
Frequency : Good for 50Hz
60Hz and also HF Versions available
Temperature : -20°C to +85°C
Fast Reverse Recovery Options available

3. High Voltage Diode 50kV 500mA

PIV : 50kV
Forward Current : 500mA / 750mA / 1000mA
Non Repetitive I_f : 3.5A / 7.0A / 15.0A
Dimension : 150mm x 25mm x 25mm
Temperature : -30°C to 100°C
Type No. : Z/19/119



4. 22kV Oil Immersed Diode



PIV : 22kV
Forward Current : 2A
Non Repetitive I_f : 50A
Temperature : -30°C to +180°C
Type : Z/30/54

5. HV Oil Immersed Modular Diode

PIV : 15kV / 30kV / 35kV / 80kV
Forward Current : 100mA / 200mA / 500mA / 800mA / 2A
Type No. : Z/40/50, Z/39/22



Diode

6. HV Diode Sticks 150kV - 400kV

PIV : Typically 150kV to 400kV
Forward Current : Typically 10mA to 100mA
Non repetitive I_f : 1A to 5A
Application : Industrial X-Ray Systems, Impulse Generators,
Nuclear Particle Accelerator
Type No. : Z/28/71 (778)



7. 24kV PIV Diode



PIV : 24kV
Typical I_f : 1.8Amps
Non Repetitive I_f : 20Amps
Temperature : -20°C to +100°C
Type No. : Z/Diode/24/1.8

8. 140kV PIV Diode

PIV : 140kV
Forward Current : 10mA
Medium : Oil, Gas or Compressed Air.
Type No. : Z/Diode/140/10



9. Very High Voltage 400kV Ring Diode



PIV : 400kV
Forward Current : 50mA/100mA/250mA/500mA
Type No. : Z/27/151 (768)

10. High Voltage High Current Shunts

Resistance : 0.05m Ω / 1m Ω / 5m Ω / 10m Ω
Current : 1kA / 10kA / 100kA
Rise Time : 1 μ s minimum
Type : Coaxial
Type No. : Z/25/115 (672)



Diode

11. High Voltage Diode (Avalanche) 25kV 0.5A

PIV	: 25 kV DC
Forward Current	: 500mA (0.5A)
Max Temp	: 125°C
Typical Temp	: 85°C
Medium	: Air/Oil/Nitrogen
Mounting	: Horizontal/Vertical
Repetitive Peak Current	: 10m sec – 30A
DC forward voltage drop	: At 0.5A it is <36Volts
Reverse Current	: Typically 10µA
Repetitive Peak forward current	: 2.0A
Type No	: Z/46/96



12. High Voltage High Frequency Diode 80kV 1A



PIV	: 80 kV (In oil or Gas)
If	: 1.0A (In oil or Gas)
Non repetitive Peak reverse voltage	: 88kV maximum
Maximum If	: 20A
Temperature	: -20°C to maximum +125°C
Forward Peak voltage	: 120 volts (Drop)
Reverse Recovery	: 150ns (If -0.5A ; IRR - 0.25A)
Leakage Current	: 5µA at 25°C; 50µA at 100°C
Dimensions	: 200mm x 35mm x 25mm
Type No.	: Z/40/25(4563)

13. High Voltage Diode 80kV 0.25A

PIV	: 80 kV DC
Peak Current	: ≤ 25µA at 80 kV DC
If	: 250 mA
Medium	: Oil / Air
Type No.	: Z/42/131



14. High Voltage High Altitude Diode 300kV 0.3A



PIV	: 300 kV (In Air, Oil & Gas)
Forward current	: 300 mA
Non Repetitive Peak Reversal voltage	: 320 kV PIV Maximum
Temperature	: -20°C to +120°C
Forward voltage Drop	: 105 volts at 300mA
Leakage current	: 20 µA at 300 kV DC
Dimensions	: Diameter=70mm; Length=535mm
Type No.	: Z/31/5

Diode

15. Cylindrical High Voltage Diode 120kV 0.3A

PIV : 120kV
IF : 300mA maximum
Temperature : Minimum - 30°C maximum 80°C
Type No : Z/33/178



16. High Voltage Diode Bridge 65kV 0.15A



Input Voltage : 48kV
Forward Current : Max 150mA
Output Voltage : 65kV DC
Type : Z/34/47

17. General Purpose High Voltage Diodes

PIV : 10kV – 100kV
Forward current : 250μA to 100A
Type No. : depends on the PIV and I_f
Please mention the PIV and forward current requirement.



18 High Voltage Diode 100kV 1.5A



PIV : 100kV
Forward Current : 1.5A
Peak Forward Current : 16A
Reverse recovery time : 1μsec
Maximum non repetitive forward current: 50A
Medium to be used in oil pressurised gas air
Protection diode suggested typically 10kΩ in series
Type No : Z/47/01

19. High Voltage Diode Assembly - Various

PIV : 30kV If 100mA
50kV If 100mA
100kV If 250mA
Type no : Z/39/84



Diode

20. Cylindrical HV Diode Bridge 10kV 1A

Input : 10kV AC 50Hz
If : 100mA to 1Amp
Diameter : 60mm, 80mm, 110mm
Length : 80mm, 110mm, 150mm
Type No : Z/49/100



21. High Voltage Diode Various 50kV DC to 200kV DC



PIV : 50kV, 100kV, 200kV
I_F : 5A, 10A, 20A
Type No : Z/48/152

22. High Voltage HF Diode - Various

PIV : 20kV, 50kV, 70kV, 100kV
Current : I_F – 5A, 10A, 15A
Frequency : 20kHz
Type No : Z/49/68



23. High Voltage Diode Resistor Module 40kV 75 ohm



Diode : RVP – 50 (50kV PIV)
Resistor : 75 Ohms ± 5%
Wkg Voltage : 40kV DC Max
Test Voltage : 45kV DC (1 Minute) Isolation
Type No : Z/29/153

24. High Voltage Power Diode 130kV - 200kV 1A

PIV : 50kV/ 100kV/120kV/150kV/180kV
I_F : 10mA to 100mA
I Peak : 20°C + 85°C
Type No : Z/42/12



DIVIDER & E FIELD PROBES

1. High Voltage 60kV Pulse Compensated Divider

Voltage : 60kV Pulse
Capacitance : 12pF approx.
Ratio : 1000:1 or 10,000:1
Type No. : Z/43/136



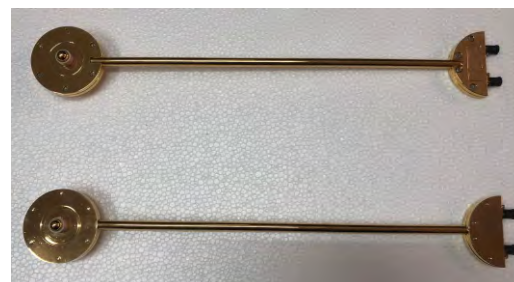
2. High Voltage 125kV Resistive Divider



Working Voltage : 125kV DC
Continuous Power : 7.8 W
Resistance : 2000 M Ω \pm 5%
Ratio : 1000:1 and 10000:1
Type : Z/34/98

3. High Frequency GHz Measuring E Field Probe 1 & 3.5 GHz

Operating Frequency : 3.5 Ghz & 1.0 GHz
Type : Bipolar Free Field System
Type No. : Z/45/35



4. High Frequency GHz measuring E Field Probes 10 GHz



Operating Frequency : 10.0 GHz
Type : Bipolar Free Field System
Type No. : Z/45/34

5. Compensated HV Probe

Voltage : 300kV DC \pm 2% Accuracy
Aux Power : 230 Volts 50Hz
Display : 4½ Digit LED
Type No : Z/40/68 (Y-1152)



DIVIDER & E FIELD PROBES

6. High Voltage Digital AC Divider 100kV AC

Max Voltage : 100kV AC 50Hz rms
HV Limb : 100pF ± 10%
LV Limb : 100nF ± 10% (Adjusted)
Ratio : 1000: 1
Output : 50 Volts for 50kV DC
Duty : Continuous
Load Current : 1.7mA at 50kV AC 50Hz
Type No : Z/27/54 (745)



7. High Voltage Probe 40kV DC



Working Voltage : 40kV DC
Test Voltage : 50kV DC
Ratio : 1000:1
Type No : Z/45/152

8. High Voltage (DC Probe) 25kV AC 40kV DC

MAC AC : 28kV AC
Maximum DC : 40kV DC
Ratio : 1000:1
Type No : Z/33/216



9. High Voltage Compensated Probe 40kV Pulse



Input : Max 40kV pulse
Output : Max 40 Volt
Ration : 1000:1
Frequency : Max 10 MHz
Max DC : 20kV DC
Max Pulse : 40kV pulse
Type No : Z/38/131, Z/39/120

10. High Voltage Divider 3.5kV DC

Input : 3.5kV DC /3.5kV AC
Output : 35V DC /35V AC
Ratio : 100:1
Duty : Continuous
Type No : Z/48/102



DIVIDER & E FIELD PROBES

11. Electric Field Probes

Input in kV	Probe Output in Volts
3kV	700mV
6.3kV	1.42V
10kV	2.12V
12.5kV	2.64V
15.4kV	3.2V
17kV	3.76V
20.5kV	4.28V
22.4kV	4.72V
24kV	5.04V
26kV	5.4V
29kV	6V
29.5kV	6.52V

Maximum Voltage : 1kV Insulation Sense Voltage



Construction : Water Drop Construction & R/C Integrator

Rise Time : $\approx 1\text{ns}$

Dimension : 100mm Diameter

Type : Z/47/140 + Z/32/36

12. High Frequency 5kHz to 25kHz 180kV/200kV Dividers

Working Voltage : 180 kV AC rms at HF

Test Voltage : 250kV AC rms at HF

Frequency Band : 20 kHz \pm 5 kHz

Ratio : 10,000:1



13. High Voltage DC Probe 65kV DC



Input : 0 to 55kV DC

Output : 0 to 55Volts DC (1Volt kV)

Test Voltage : 65kV DC (minute)

HV Resistor : 1000 Meg \pm 5%

LV Resistor : 1Meg \pm 5%

Ratio : 1000:1

Type No : Z/24/152 Y- 676

14. High Voltage Hand Held Meter up to 100kV DC

Models : 20kV DC / 40kV DC / 60kV DC / 100kV DC

Display : LCD Based Battery Operated 3½ Digits

Accuracy : $\pm 2\%$

Meter : Metal Shielded System

Type no : Z/22/141



DIVIDER & E FIELD PROBES

15. Hand Held kV Meter up to 60kV DC



Input : 9V Battery Operated
Measurement : 20kV DC/40kV DC/60kV DC
Accuracy : $\pm 2\%$
Weight : 1.2kg
Probe Length : 400mm, Cable Length: 3 meter
Type No : Z/50/86

16. High Voltage Measurement Probes 0 to 100kV DC

Operation Voltage : 0 to 100kV DC
Probe Dimension : Height = 415mm
Diameter = 75mm
Type No : Z/50/88



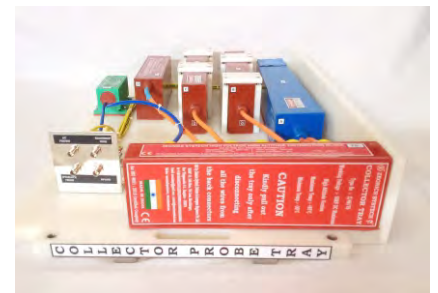
17. High Altitude High Voltage Tray (Cathode)



Input : 37kV DC & 47kV DC
Output : Controlled AC Probe
DC Probe Diodes
Type No : Z/46/72
Project : HA HV Radar System

18. High Altitude High Voltage Tray (Collector)

Input : 37kV DC & 47kV DC
Output : Controlled AC Probe/ DC Probe
2-T Spark Gap
Type : Z/46/76
Project : HA HV Radar System



19. High Voltage Large Energy Discharge Stick



Operating Voltage : ≈ 65 kV DC Max at 1kJ
Resistor : 10 Ω , 50 Ω , 100 Ω
Max Energy : 1000 Joules
Type : Z/51/32
Dimension : L=1280mm x Diameter x 30mm
Weight : 2.6kg

DIVIDER & E FIELD PROBES

20. High Voltage 150kV Capacitive Divider

Max Voltage : 150kV
Loading Capacitance : 20pF
Rise time : up to 100 ns
Ratio : 10000:1 or 1000:1
Cable : 50 Ohms matching impedance cable with BNC output
Type No. : Z/32/8



21. High Voltage AC/DC Divider 400kV DC



Working Voltage : 400kV AC
Capacitance : 1000pF \pm 5%
Test Voltage : 600kV
Type No. : Z/41/138

22. High Voltage Divider Column 500pF

Capacitive Value : 500pF/1000pF/2000pF
Working Voltage : 250kV/500kV/1000kV
Type No. : S/16/110



23. Highly Compact Air Borne Probe 50kV DC



Working Voltage : 50kV DC \pm 1%
Test Voltage : 60kV DC \pm 1%
Type : Measurement and Interlock
Output : 50V at 50kV DC
Ratio : 1000:1
Type No : Z/22/91

DIVIDER & E FIELD PROBES

24. High Voltage Fluke Probe Conversion Kit

Input : 40kV DC or 28kV AC
Display : Meter (Multimeter)
Accuracy : $\pm 2\%$
Test Voltage : 40kV DC T- B
Type No. : Z/42/118



25. High Voltage AC/DC Probe 50kV DC



Input : 50kV AC / 50kV DC
Output : 50V AC / 50V DC
Duty : 100% on duty
Life : 50,000 hours continuous duty
Type No. : Z/29/160

26. High Voltage AC rms Divider

Input Voltage : 230 Volts, 50Hz, Single Phase
Measuring Facility : 100kV AC rms, 50Hz & 200kV rms,
Accuracy : $\pm 2\%$ of Working Voltage
Application : To Measure High Voltage rms AC
Type : Z/27/54



27. General AC/DC Probe



Working Voltage : 50kV / 60kV / 100kV DC
Test Voltage : 60kV / 80kV / 120kV DC
Ratio : 1000:1
Altitude : 50km
Type No. : Z/29/50, Z/W/B/6-90 (WLR/FLR/TLR)

28. Magnetic Probe for Oscilloscope

Max : 1 Tesla (10,000 Gauss)
Output : 13 gauss/1mV
Type No : Z/30/50



DIVIDER & E FIELD PROBES

29. Lightning High Voltage 800kV Impulse Divider

Max Voltage : 800kV impulse
Typical rise time : 1.2 μ s/50 μ s or 8.0 μ s/20 μ s
Duty : Continuous
Type No. : S/19/76



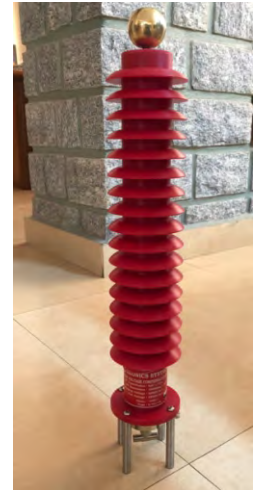
30. High Voltage 150kV Compensated Divider



Working Voltage : 150kV DC/225kV Pulse
Ratio : 10,000:1
Composition : R and C Type P
max frequency : 10MHz
Height : 750mm
Diameter : 290mm
Capacitance : 27pF
Base Diameter : 30cms approximate
Standard Divider Ratio : 10000:1
Type No : Z/34/01

31. High Voltage 200kV Compensated Divider

Working Voltage : 200kV DC
Ratio : 1000:1 or 10,000:1
HT Resistance : 2000M Ω \pm 2%
Capacitance : 6pF \pm 2%
Type No : Z/43/140



32. High Voltage DC Probes Measurement & Feedback



Input voltage : 0 to 60kV DC/ 0 to 100kV DC
Output : 0 to 60Volts / 0 to 100Volts
Ratio : Typically 1000:1
Execution : Moulded Assembly
Termination : HVC – 60 HVC-100 Connector Blocks
Meter : A 3½ Digit or 4½ Digit Meter is Provided.
Aux Power : 230 Volts 50Hz 1 ϕ

EMP / NEMP / HEMP Products

1. NEMP Filter for HEMP Application Single Line

Input : 1 ϕ and 3 ϕ System
Current : 5A to 800A
Duty : Continuous
Type No. : Z/43/28



2. NEMP Filters for HEMP Applications 4 Line



Rms Current : 400A/600A/800A/1000A/1500A/2000A
Phases : Options for Single phase or 3 phase
Complying with : MIL-STD-188-125-1

3. EMP 180kV Pulse Gun Source

Input : 230V, 50 Hz, 1 Phase
Output : 180kV output pulse
Rise Time : ≤ 3.0 ns
Construction : 180kV, Marx Generator
Type No. : Z/37/10



4. High Rep Rate EMP Pulser



Input Voltage : 230 V, 50Hz (Mobile version 24V DC)
Output Voltage : 100kV Pulses
Rise Time : ≈ 2.2 to 2.8 ns
PRR : 50pps
Configuration : Mobile
Antenna : Flat Transmission Line 100 Ω
Type No. : ZHS/01/53

5. Pulse Current Injection System for NEMP Testing

Voltage : 60kV
Peak Current : 1.2kA
Z_o : 60 Ohms
Rise Time : 20ns \pm 10%
Pulse Width : 550ns \pm 10%
Standards : MIL-STD-188-125-1
Type No : Z/43/111



EMP / NEMP / HEMP Products

6. 40A EMP Surge Protector/Filter

Nominal Voltage U_N	: 3 x 400/230 V AC, /50/60Hz
Max operating Voltage U_c	: 3 x 460/255 V AC, 50/60Hz
Nominal Current I_N	: 40A Effective at T_{AMB} 40 C
Max Surge Current I_{max}	: 100kA Each L/N PE for 8/20 μ s, T_{AMB} 40°C Atleast 1 Pulse
Max Lightning Impulse current I_{IMP}	: 20kA/ Each L/N PE Shape 10/350 μ s, T_{AMB} 40°C Atleast 1 Pulse
DC Resistance	: <7.5m Ω Each L/N
Resistance Current after 1kA Pulse	: <10A Each L/N, Short Pulse According MIL-STD-188-125-1
Residual Voltage Surge	: <1kV L/NPE, Pulse 4kV/2kA According IEC 61000-4-5
Attenuation	: > 80dB; 200kHz - 1GHz, 50 Ω - System
50Hz AC – Leakage Current	: <0.7A LPE, AT U_N , 50Hz
Combination Surge Protection Device	: SPD Type 1+2
Fault Indication	: By opening of Potential – Free Contact
Dimensions	: 750 x 370 x 129mm
Weight	: Approx. 32kg
Type No.	: Z/46/46 (Y- 1338)



7. 125A EMP Surge Protector/Filter

Nominal Voltage U_N	: 3 x 400/230 V AC, /50/60Hz
Max operating Voltage U_c	: 3 x 460/255 V AC, 50/60Hz
Nominal Current I_N	: 125A Effective at T_{AMB} 40°C
Max Surge Current I_{max}	: 100kA Each L/N PE for 8/20 μ s, T_{AMB} 40°C Atleast 1 Pulse
Max Lightning Impulse current I_{IMP}	: 20kA/ Each L/N PE Shape 10/350 μ s, T_{AMB} 40°C Atleast 1 Pulse
DC Resistance	: <4.5m Ω Each L/N
Resistance Current after 1kA Pulse	: <10A Each L/N, Short Pulse According MIL-STD-188-125-1
Residual Voltage Surge	: <1kV L/NPE, Pulse 4kV/2kA According IEC 61000-4-5
Attenuation	: > 80dB 200kHz - 1GHz, 50 Ω - System
50Hz AC – Leakage Current	: <0.7A LPE, AT U_N , 50Hz
Combination Surge Protection Device	: SPD Type 1+2
Fault Indication	: By opening of Potential – Free Contact
Dimensions	: 1360 x 570 x 129mm
Weight	: Approx. 83kg
Type No.	: Z/46/56 (Y- 1327)



8. 200A EMP Surge Protector/Filter

Norminal Voltage U_N	: 3 x 400/230 V AC, /50/60Hz
Max Operating Voltage U_C	: 3 x 460/255 V AC, 50/60Hz
Norminal Current I_N	: 200A Effective at T_{amb} 40 C
Max Surge Current I_{MAX}	: 100kA Each L/N PE for 8/20 μ s,
Max. Lightning Impulse Current I_{Imp}	: 20kA/ Each L/N PE for 10/350 μ s,
Attenuation	: > 80dB for 200kHz- 1 GHz, 50 - System
Combination Surge Protection Device	: SPD Type 1+2/ Fault Indication by
Type No	: Z/46/136 (Y- 1339)



EMI FILTERS

9. 1000A NEMP Filter For C3 Installation



Input	: 230V 1phase
Output	: 230V 1 phase
Current	: 1000A
Power	: More Than 440kVA
Frequency	: 50 Hz
Dimensions	: L= 1520mm W=230 H=245
Configuration	: Wall Mountable
Insertion Loss	: Typically 80 dB Attenuation Above 400kHz
Specifications	: MIL – STD - 188-125-1
Type No.	: Z/45/132

10. Three Phase 4 Line EMI Filter 100A

Nominal Voltage	: 3 x 400/230V
Voltage	: 415V ± 10%, 50/60 Hz
Output	: 3 Phase, 4 Line, 100Amps, 50Hz (Clean Power)
Temperature	: Temperature Rise <35° C
Insertion Loss	: 40 dB @ 10 kHz, / 70 dB @ 14 kHz to GHz
Surge Protection	: Provided (MOV)
Mounting Surface	: Conductive
Over Current	: 600A for 8 Seconds
Line to Ground HV	: 2.5 kV DC (MOV Disconnected)
Line to Line	: 1.5kV DC
Leakage Current	: < 2A
Storage Temperature	: - 40° C to +70° C
Operating Temperature	: - 25° C to +55° C
RH	: 95% Non – Condensation at 40C
Type No	: Z/47/54 (Y – 1361)



11. 800A NEMP Filter for C3 Installation



Input	: 230V/50Hz
Output	: 230V 50Hz
Current	: 800A
Power	: More than 180k VA
Dimensions	: L= 1520mm W=230 H=245
Configuration	: Wall Mountable
Insertion Loss	: Typically 80 dB attenuation above 400kHz
Specifications	: MIL – STD - 188-125-1/2
Type No.	: Z/42/90

12. EMI RF Coaxial Filter

Continuous current	: 5A to 100Amp
Working Voltage	: 125V AC /400 V DC
	: 250V AC /800V DC
	: 2500V AC /8 kV DC
Frequency	: 100 Hz to 700 Hz
Attenuation	: ≈ 80 dB for high frequency
Type No.	: Z/45/48, Z/46/88



EMP / NEMP / HEMP Products

13. High Voltage Pulse Gun EMP- 400

Working Voltage : 40kV DC
Peak Current : 30kA
Energy : 400 Joules
Rise Time : ≤ 50 ns
Pulse Energy : 1.2 GW
Configuration : Mobile
Switch : Gas Filled Trigatron
Type No. : Z/34/94



14. High Voltage EMP Hand Held System



Input Voltage : ON Board 36V Batteries
Output Voltage : Pulse of 40kV
Pulse Current : ≈ 30 kA
Rise Time : Typically 10 μ s
Application : Generation of 40kV Pulses on the System
Pulse Component : Yes, Available with a Peaking Gap
Type No. : Z/34/94

15. EMP Blaster Gun MK – II

Input Voltage : 230 V, 50Hz (Mobile Version 24V DC)
Output Voltage : 100kV Pulses
Rise Time : ≈ 2.2 to 2.8ns
PRR : 50pps
Configuration : Mobile
Antenna : Customer Based
Type No. : ZHS/01/53



16. EMP Simulator



Voltage : 25kV Pulser
Rise Time : 2.3ns \pm 20%
Power : 23ns \pm 5ns
Complying with : MIL-STD-461-B-RS-107
Repetition Rate : Max 5pps
Field Strength : ≥ 50 kV/meter
Type No : Z/31/126, Z/39/142

17. EMP Launcher Module

Voltage : 25kV/50kV/Output
Rise Time : 2.3ns \pm 20%
Pulse Width : 23ns \pm 20%
Complying with : MIL-STD-461-B-RS-107
Dimension : 250 x 250 x 750mm
Type No. : Z/43/142



Pulser

1. High Voltage PFN Modulators (PFN Based Pulser)

Voltage : 10kV to 100kV values
Capacitance : 1nF to 100 μ F
Time duration : 10ns to 100 μ s (Adjustable)
Type : 10 Stage / 20 Stage systems
Type No. : Z/27/26 (112)



2. High Voltage 25kV Pulser



Pulse : 1.2/50 μ s at 25kV output
Application : Continuous Lightning Pulse Generation System
Load : Resistive and Capacitive
Type No. : Z/41/56

3. High Repetition Rate Pulser 1000kV Pulse

Erected Capacitance : 250pF \pm 10%
Output Voltage : max 1MV in Open circuit
Voltage/Stage : 100kV DC
PRR : 50pps
Rise Time : \leq 50ns
Pulse Width : 110 to 200ns
No. of Stages : 10
Type : Marx Insert
Type No. : S/14/48, Z/21/5



4. Ultra-Low Inductance 100-140kV Pulser

Input voltage : 100 - 140kV
Output pulse : max 140kV
Coaxial capacitor : 125pF \pm 10%
Rise time : 2.3 ns

These assemblies are essentially used for electromagnetic research where one needs to generate high voltage fast rise time pulses. The system comes tightly coupled with a coaxial capacitor and its peaking gap. Additional features like power supply, connectors and resistors can be supplied on special request.

It can also be used as a source for 100 ohms EMP simulators.

Type No. : ZHS/01/59



5. High Voltage Coaxial Pulser 180kV

Erected Capacitance : 100PF
Erected Voltage : 180kV
Energy : 1.62 Joules at 180kV O/P
PRR : Maximum 10PPS in 50Ω
Rise Time : 2ns
Type : Z/22/108



6. High Voltage Coaxial Pulser 20kV



Input : Max 40kV DC
Output : Max 20kV Pulse (Square)
Load : 50 ohm
PRR : Max 100 PPS
Type : Z/43/45

7. High Voltage Pulser 200kV

Erected Capacitance : 90PF
Erected Voltage : 200kV
Energy : 1.8 Joules at 200kV
PRR : Max 10 PPS in 50Ω
Rise Time : 2nsec
Type : Z/30/15



8. PFN 5μs Pulse width, 40kV Output Into 50Ω



Working Voltage : Max 40kV/ 80kV DC
Capacitance : 10nF / 40kV x 10 limbs
Inductance : 8.25μH x 10 limbs
PRR : Max 1pps to 100pps
Type No. : Z/34/130

09. Voltage Coaxial Pulse Sources

Output : 300 kV
Pulse Rise Time : < 50n Sec
Application : Testing of Systems
EMP Source
Energy : 50Joules
Type No : ZHS/001/52



Load Bank

1. High Voltage Tandem Load



Working voltage : 100kV DC / 300kV DC
Current : 1-10mA
Test voltage : 110kV DC / 330kV DC
Power : 100 – 1000 W
Application : Series / Parallel Connection
Type No. : Z/40/64

2. High Power Crowbar Resistor Bank 1MW

Resistance Value : 1k Ω 8 Nos. in Parallel
Max Energy : 50kJ, 5 Minutes Cooling 5pps
Application : As a Crowbar Resistor for a 1 MW Klystron Facility
Weight : Assembled 190kgs
Type : Non Inductive
Type No. : ZHS/01/50



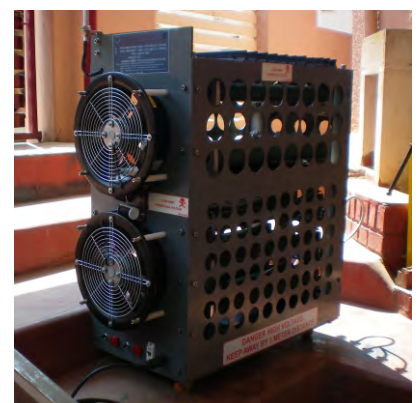
3. High Voltage Resistive Load Bank



Resistors : Non Inductive / Wire Wound
Section : Cathode and Collector
Auxiliary Power : 230 V, 50Hz, 1 Phase
Voltage : 15kV DC Operation
Minimum Power : 1kW
Maximum Power : 100 kW
Temperature : -20°C to +100°C
Application : Testing of Radar HV Power Supply without RF Load
Type No. : Z/27/60

4. High Voltage Forced Air Cooled Load Bank

Working Voltage : 50kV DC to 120kV DC
Isolation Voltage : 75kV DC to 190kV DC
Power : 10kW to 30kW
Application : Testing of DC Power Supply with Variable Taps.
Type No. : Z/25/111 (632)



Load Bank

5. High Voltage DC Load Bank 18kW



Working Voltage : 45kV DC to 65kV DC
Power : 18kW
Resistor Distribution : Odd + Even
Duty : Continuous Military Duty
Weight : 190kgs
Type No. : Z/32/86

6. High Voltage Compact Load Bank - 1

Working Voltage : 15kV to 25kV DC
Power : 1.0kW to 24.0kW
Resistors : Non Inductive, Glass Passivated
Application : Testing of TWT Power Supply
Type No. : Z/36/50



7. High Voltage Compact Load Bank - 2



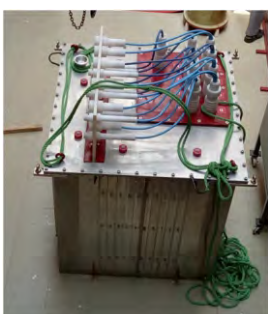
Voltage : 10kV/25kV DC
Current : 0.2A/0.5A/1.0A
Power : 1kVA to 15kVA
Type : Non-Inductive Resistor
Type No. : Z/35/60

8. Portable Compact Load Bank 5kW

Working Voltage : 5kV DC to 60kV DC
Resistance Range : 0 to MΩ Ranges Possible
Power : Max 5000W
Type No. : Z/35/62



9. High Voltage Industrial Load Bank 150kW



Power : 150kW, 200kW, 300kW
Voltage : 150kV DC / 200kV DC
Duty : Continuous System
Cooling : Duty Continuous
Container : Metal Force Cooled
Type No. : Z/37/88

Load Bank

10. High Voltage Load Resistor 10MΩ 100kV DC

Resistance : 10 Mega ohm \pm 10%
Working Voltage : 100kV DC
Test Voltage : 110kV DC (1 Minute)
Power : 1000Watts
Type No : Z/43/76



11. High Voltage Compact Load Bank 2.10kW



Input Voltage : Typically 3kV, 5kV, 10kV and 15kV
Typical Load : 2kW, 3kW and 10kW
Auxiliary Air : Yes Supplied
Typical Life Duration : Continuous 8 Hours/8 Hours Switching off
Typical Dimensions : Length 1000mm/250/250mm,
500mm/250/250mm
Type No : Z/38/40, Z/43/63

12. High Voltage Isolated Load Bank

Voltage : 25kV to 100kV
Current : 100mA to 20.0Amps
Power : 5 - 150kW
Resistor : Bulk Ceramic Resistor
Type No : Z/34/2



13. High Voltage Load Bank Oil Filled 6kVA



Resistor Value : 350kΩ/600kΩ
Power : 6000VA
Duty : Continuous
Application : Load for Transformer/ AC Banks
Type No : Z/49/11

14. High Voltage Load Bank 60kV

Typical voltage : 60kV DC
Load power : 6kW / 12kW / 16kW / 24kW
Termination : Different Suitable for Testing
TWT Anode & Cathode Supply
Type : Load Bank



Marx Generator

1. Mobile EMP Generator



Input Voltage : Battery or 230 volts AC 50Hz
Output Voltage : Typically 2.3nsec /23nsec Waveform
Impedance : 100 ohm Termination Impedance
Battery Life : Typically 200 Shots Battery Charge
Field Strength : More Than 50 kV/Meter
Type No : Z/41/157

2. Marx Generator / EMP Generators/ HV Power Supply

Input : 230 volts, 50 Hz Single Phase
Output : Typical 3kV Pulse No Reversal
Maximum Current : 370A Pulse in Micro Seconds
PRR : 1Hz
Application : Firing Ignitrons Typically Ignitron NL8900
Type No : Z/46/104



3. High Voltage Cold Plasma Source



Input Voltage : 230V 50Hz 1 ϕ
Output Voltage : 40kV/20kV HF System
Plasma Torch : ϕ of 15mm, Length of 250mm
Power : 1600W
Type No. : Z/42/28

4. Impulse Generator (Marx) With Wave Shaping System

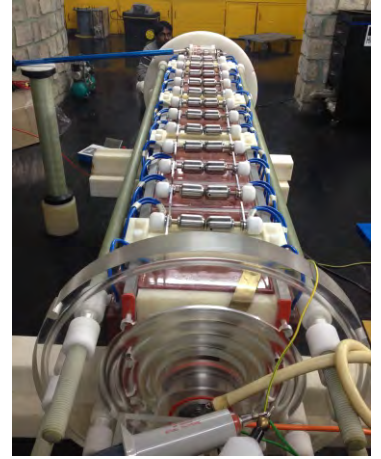
Output : 200kV Pulse
Open Circuit : 200kV Output, 20 Joules
PRR : Max 5ppm
Rise Time : $1.2\mu\text{s} \pm 20\%$
Pulse Width : $50\mu\text{s} \pm 20\%$
Operating Pressure : 20psi air Max
Weight : $\approx 45\text{kgs}$
Type No. : Z/34/139



Marx Generator

5. High Voltage 700kV Output Marx Insert

Input : 50kV DC \pm 5%
Output : 700kV Pulse
Peak Current : Max 14kA
PRR : Max 1ppm
No. of Stages : 14
Type : Retrofit
Dimensions : Diameter-580mm; Length-1800mm
Type No. : Z/33/44



6. High Voltage Marx Generator 500kV (2kJ)



Input : 230 V, 50 Hz, 1 Phase
Output : 500kV Pulse
Energy : 1 kJ / 2 kJ
PRR : Max 5 ppm
Rise Time : \approx 140ns
Type No. : Z/28/19

7. High Voltage, Low Inductance Marx Generator 1000kV

Output Voltage : 1000kV
Erected Capacitance : 200pF
Max Rise Time : 130ns
Typical Diameter : 580mm
Typical Length : 2.1 m
Max Pulse Rep Rate : Per Second
Minimum Load : 50 Ohms be Connected
Pressure : N₂ Around 30-50psi
Type No. : Z/20/123 ; S/14/77



8. High Frequency Ozone Generator



Input Voltage : 230V, 50Hz, Single Phase
Output Voltage : 15 to 20kV at 20 kHz
Output Ozone : 6 Litres/Minute (At Full Power)
Type No. : ZHS/01/22; ZHS/001/099

Marx Generator

9. High Voltage High Energy Nano Particle Generator

Working Voltage : 25kV DC to 40kV DC
Energy : 2.5kJ
Max Wire : Diameter - 0.36mm; length - 300mm
Application : Generation of Metal Nano Particles in a Confined Space
Type No. : ZHS/001/098



10 . HV HF Inverter for Plasma Generator



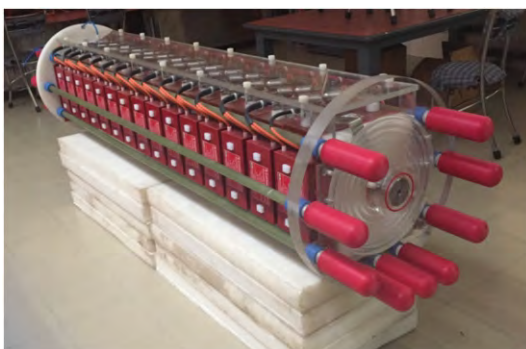
Input : 230V 50Hz 1Ø
Output : 20kV AC rms at 20kHz
Power : 1000W
Type No. : Z/42/28

11. High Voltage HF Plasma Generator

Input Voltage : 230V 50Hz 1Ø
Output : 40kV AC 20kHz Plasma System
Plasma Torches : 5 Plasma Torches Can be Attached
Type No. : Z/42/28, Z/42/64



12. High Energy High Voltage Marx Inserts



Output Voltage : 500kV/800kV/1000kV/1500kV
Current : 10kA to 40kA
Impedance : $\approx 10\Omega$ to 30Ω Range
Type No. : Z/35/82 (Y-1208)

Marx Generator

13. High Voltage Marx Generator (Weapon System)

Input : 230 Volts, AC 50 Hz
or
: Battery Pack 12V / 14AH
Output : 300 kV Output Pulse
Type No. : Z/35/44



14. High Voltage HF Generator (Hydrophobicity Tester)



Input : 230Volt 50Hz 1 ϕ
Output : 40kV pk to pk
Application : Corona Treatment/ Plasma Generator
Type No : Z/47/148

15. Pulse Generator Crowbar Trigger Unit

Input : 230 Volts AC \pm 10% 50Hz (3 Pin Connector)
Output : 350 Volts to 650 Volts (Non Specific Wave Shape)
Control : I) + 5 Volts TTL or Higher Pulse (BNC Connector)
II) Manual Override on Manual Switch
PRR : 30 ppm Maximum
Duty Cycle : Continuous
Type No : Z/16/1



16. High Voltage Shock Wave Generator



Input : 230 Volts, 50Hz, 1 Phase
Output : 20kV Pulses of 1 μ f & 25kA
I_{peak} : 25kA to 40kA
Energy : 200 Joules Per Shot
PRR : 5ppm
Type No : Z/38/124

17. Impulse Generator (MARX) With Wave Shaping System

HV Pulse Maximum Output : 200kV
Open Circuit : 200kV output, 20 Joules
PRR : Maximum 5ppm
t₁ : 1.2 μ s \pm 20%
t₂ : 50 μ s \pm 20%
Operating Pressure : 20 PSI Air Maximum
Weight : \approx 45Kg
Type No : Z/34/139



Power Supply

1. Bipolar DC Power Supply

Input : 230Volt 50Hz
Output Voltage : 0 to +100kV - 0-100kV
Output : 200kV at 20mA
Construction : Tracking
Type No : Z/39/94



2. High Voltage Modulator Supply



Input : 230 Volts 50Hz
Output : Single Output 0 to 50kV DC or
Dual Output : - 50kV - 0 - + 50kV DC
Current : 10mA/50mA/100mA
Construction : Tracking Type Supply
Type No : Z/39/96, Z/39/94

3. 60kV 1mADC Power Supply SMPS Type

Input : 230 Volts, 50 Hz
Output : 0 to 60kV DC Variable Voltage
Output Current : Maximum 1mA
HV Wire Length : 3.00 mtrs
LV Wire Length : 2.00 mtrs
Duty : Continuous Duty
Protection : a) Short Circuit Protection
: b) Over Voltage Protection
: c) Over Current Protection
Dimensions : W =480; H= 125; D= 500mm
Type No. : Z/49/104



4. 5kV 0.5A DC Modulator Supply



Input : 230Volt 50Hz 1 ϕ
Output : 5kV DC at 500mA
Power : 2500Watts
Duty : Continuous
Rotary : Rotating Supply for Radar
Protection : Short Circuit Over Voltage
Ripple : 1%
Type No : Y- 1460

5. 24kV DC Compact Power Supply

Input : 230Volt 50Hz 1 ϕ
Output : 0 to 24kV DC at 250 μ A
Duty : Continuous
Type No : Z/48/54



Power Supply

6. High Voltage DC Power Supply 60kV 10mA

Input : 230 Volt 50Hz
Output : 0 to +60kV or
0 to -60kV DC
Output Current : 10mA
Protection : Over Voltage /Over Current
Power : 600 Watts
Type No : Z/48/160



7. High Voltage AC Power Supply 50kV AC



Input : 230 Volts 50Hz 1 ϕ
Output : 0 to 50kV AC
Current : 100mA Maximum
Power : 5000VA
Duty : Continuous
Application : Pollution, CBD, Plasma Generator,
Burn out, Insulator Testing.
Type No : Z/49/10

8. High Voltage Isolated Collector Power Supply 5kV 0.5A

Input : 230 Volt 50Hz
Output : 0 to 5kV DC X 3 Modules
Power : 2.5kVA (Total – 7.5kVA)
Operating Current : 500mA X 3 = 1500mA
Type No : Z/48/80



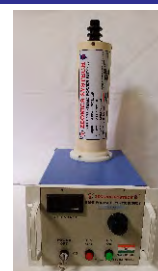
9. High Current Supply 4000A rms



Input : 230 Volts 50Hz 1 ϕ
Output : 4000 A rms at 50Hz
Power : 8000 VA to 20,000 VA
Application : Bus Bar Current Feed Test, Filter Recharge Test
Type No : Z/44/142

10. High Voltage Electro Spinning Power Supply 40kV DC

Input : 230 Volt 50Hz 1 ϕ
Output : 0 to 40kV DC (300 μ A)
Protections : Over Voltage /Over Current
Current : Maximum - 300 μ A
Type No : Z/29/04, Y- 882



Power Supply

11. High Voltage VAC ION Supply 4kV DC

Input : 230V 50Hz Single Phase
Output : 0 to 4 kV DC
Load Current : Maximum 100 μ A
Tripping System : 10 μ A to 100 μ A
Duration of Operation : Continuous
Output Connector : High Voltage Connector
Output Cable : RG 58 or Similar Cable
Type No : Z/46/112



12. High Voltage 30kV DC Power Supply



Input : 230 Volt 1 ϕ 50Hz
Output : 0 to 30kV DC +Ve & -Ve
Terminal : HV Cable Connectors
Type No : Z/48/70 (-VE)

13. High Voltage Pulse Power System 7.5kJ

Capacitance : 600 μ F \pm 10%
Working Voltage : 5kV DC
Energy : 7.5 Kilo Joules
PRR : 1 Pulse Per 5min
Type No : Z/33/22



14. High Voltage Protected Source



Input : 230 Volt 50Hz 1 ϕ
Output : 80kV DC with Protection
Max Surge Current : 100mA
Protection : Over Voltage
Over Current
Forward Voltage
Type No : Z/34/159

Power Supply

15. Low Cost Trigger Generator

Input Voltage : 230V 50Hz 1Ø
Output Voltage : 500V Pulse
Command : Manual + 10V Pulse
Type : Z/33/146



16. High Voltage 500kV Portable Power Supply



Input : 440V, 50Hz 3Ø
Output : 0 to 500kV DC at 1mA, 5mA, 10mA
Duty : Continuous Duty
Power : 500W, 1000W, 2500W, 5000W
Type No. : Z/40/52, Z/40/65

17. High Voltage 100kV 1mA Power Supply

Output : 0 to 100kV DC at 1mA
Power : 100W
Duty : Continuous
Applications : Poling, Electrospinning, Lasers,
Weapon Systems, Marx Generators
Type No. : Z/33/200



18. High Voltage 150kV DC Power Supply



Input : 230 V, 50Hz, 1 Phase
Output : 0 to 150 kV DC at 700µA
Polarity : Optional + ve or -ve Output
Duty : Continuous Operation
Applications : Electrophoresis, Poling, Electrospinning,
Ion acceleration, Nuclear Science, X - Ray
Type No. : Z/33/200, Z/33/204

Power Supply

19. High Voltage Electrospinning Power Supply

Input Voltage : 230V 50Hz AC/ 110V 50Hz AC
Output Voltage : 0 to 40kV DC at 50 μ A
Controls : Speed and Voltage Control
Indication : Analog Meter/ Digital Meter For Voltage
Temperature : -20°C to +85°C
Type No. : ZHS/001/080



20. High Voltage 0 to 60kV DC/30mA Power Supply



Input Voltage : 230 V 50Hz 1 \emptyset
Output Voltage : 0 to 60kV DC
Current : 30mA or 60mA
Ripple : 2% Maximum
Regulation : \pm 5%
Duty : Continuous
Type No. : Z/34/32

21. Variable High Voltage DC Power Supply

Input Voltage : 230 V, 50Hz, Single Phase
Output Voltage : 25kV to 60kV DC
Power : 500VA to 5000VA
Type : 50Hz Transformer + Resistor + Capacitor
Type No. : ZHS/01/33



22. High Voltage Insulated Rack for 150kV DC Power Supply



The Entire Rack is Isolated to Take a Floating HV Power Supply of 150kV DC
Type No. : ZHS/001/078

Power Supply

23. High Voltage 50kV DC 2mA Power Supply

Input Voltage : 230 V, 50Hz, 1 Phase
Output Voltage : 0 to 50kV DC
Output Current : 2mA max
Type : Pneumatic Switch Variant HV ON/OFF in ON Condition
Type No. : Z/34/194



24. High Voltage 10-30kW Power Supply



Input Voltage : 230 V, 50Hz or 400V Single Phase
Output Voltage : 10kV DC / 20kV DC / 30kV DC
Output Current : 1.0 Ampere
Power : 10kW, 20kW, 30kW
Protection : Over Voltage, Over Load, Over Current
Zero Start Protection
Ripple : $\pm 7\%$ on Full Load
Type No. : ZHS/01/27

25. High Voltage 250kV DC Power Supply

Input : 230 V, 50Hz, 1 Phase
Output : 0 to 250kV DC at 1mA Maximum
Configuration : HV / HF + Multiplier
Duty : Continuous at 70% of Output Voltage
Type No. : Z/32/174 (881); S/17/76



26. High Voltage 60-100kV DC Power Supply



Input : 230 V, 50Hz, Single Phase
Output : 0 – 60kV DC, Maximum 3mA / 1mA
0 – 100kV DC, Maximum 3mA / 10mA
Display : Digital Voltage Display or Current Analog Display
Protection : a. Short Circuit b. Over Voltage c. Over Current Trip
Type No. : Z/25/6

Power Supply

27. High Voltage Slim Power Supply

Input : ON Board Batteries
Output : 30kV DC at 5mA
Power : 150 W
Type No. : Z/35/44



28. High Voltage VAC Ion Power Supply



Input : 230V, 50Hz, Single Phase
Output : 3.0kV DC/5.0kV DC
Current : Max 2mA Output
Power : 3 W / 5 W
Type No. : ZHS/01/21

29. High Voltage 20/40kV DC Power Supply

Input : 230V, 50Hz, Single Phase
Output : 0 to 20kV DC or 0 to 40kV DC
Current : 10mA and 250mA; 0.5mA to 5A Version
Type No. : Z/29/04 (822)



30. Multi Output High Voltage and Low Voltage Power Supply



Input : 230V 50Hz 1Ø
Output : Multiple Output 2/3/6 Output For Special Applications
Output typically : 5V, 15V, 20V, 25V, 100V, 200V DC
Type No. : ZHS/01/24

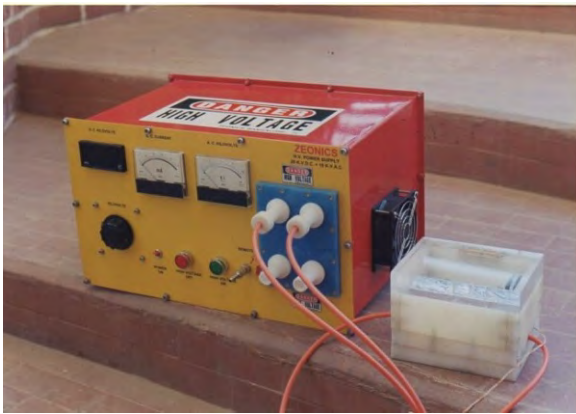
Power Supply

31. High Voltage Magnetron Filament Power Supply

Input Voltage : 230V 50Hz Single Phase
Output Voltage : 0 to 30V
Output Current : 10 to 20A
Isolation : Typically 30kV DC
Application : Supply for Magnetron Filament
Type No. : ZHS/01/38



32. High Voltage AC + DC Combined Power Supply 20kV AC



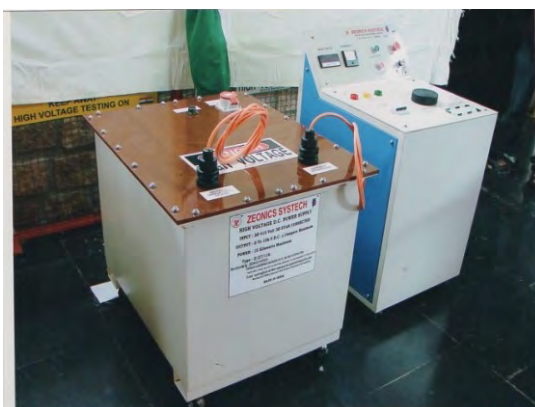
Input Voltage : 230V 50Hz 1 ϕ
Output Voltage : 0 to 20kV AC at 20mA
0 to 30kV DC at 20mA
Type : Linear HV Power Supply Suitable For Regular
AC + DC work
Type No. : ZHS/01/39

33. High Voltage AC + DC Power Supply 50kV AC

Input Voltage : 230V 50Hz / 110V 50Hz
Output Voltage : 0 to 50kV AC, 0 to 70kV DC
Output Current : Typically 100mA
Type : Oil-Immersed
Application : Harsh Environment Applications
Type No. : ZHS/01/40



34. High Voltage Modular Power Supply 15-25kV DC



Input Voltage : 230V 50Hz 1 ϕ / 415V 50Hz 3 ϕ
Output Voltage : 15kV DC / 20kV DC / 25kV DC
Output Current : 1A
Power : 15kW, 20kW, 25kW
Type : Auto Transformer, HV Transformer and Capacitor
Application : Charging of Capacitor Banks, Industrial Application
Type No. : Z/27/116

Power Supply

35. High Voltage 26kV DC Power Supply

Input Voltage : 200V 3Ø 400Hz Delta Connected
Output : 26kV DC at 230mA
Power : 6000 W
Duty : Continuous
Application : Radar DC Power Supply
Weight : 106kg
Type No. : Z/42/138



36. High Voltage DC Isolated Power Supply



Primary : 230V 50Hz 1Ø
Secondary : 3000V DC 100mA DC Supply
Power : 300W
Isolation : 150kV DC
Range : 1000W to 2000W
Type No. : Z/38/98

37. High Voltage High Frequency 33kV Transformer

Input : 450V Input AC 20kHz
Output Current : 606mA
Output Voltage : 33kV DC
Power : 20 kW
Duty : Continuous
Type No : Z/43/24/60 (Y-1261)



38. High Voltage High Frequency 47kV Transformer



Input : 450V Input AC 20kHz
Output Current : 139mA
Output Voltage : 47kV DC
Power : 6.4 kW
Duty : Continuous
Type No : Z/43/24/48 (Y-1259)

Resistor

1. High Voltage Serpentine Low Inductance Resistor



Working Voltage : 200kV AC; Maximum 300kV AC
Resistor Range : 200k Ω
Current : 1.2mA to 2.0Amps
Type : Oil Immersed Type/ Gas Cooled Type
Power : 50W to 3000W Assorted
Type No. : Z/20/69

2. High Voltage Inline Coaxially Fed Resistors (Pressure Sealed)

Resistance Range : 10 Meg Ohms to Maximum of 1 Giga Ohms

Max Energy / Resistor : Typically 100 W

Max Voltage in Assembly : Typically Maximum 200kV

These are Used as Bleeder Resistors for the Coaxial Generator as and When Required with a Special High Voltage Connector and Press Fit System.

Type No. : ZHS/01/60



3. Rail Gap Biasing Resistors (1/2 or 2/3)



Working Voltage : 70kV DC
Test Voltage : 100kV DC
Resistance : 500M Ω + 500M Ω
Type No. : Z/34/68

4. High Voltage Non-Inductive Resistive Assembly

Max Voltage : 60 kV DC Isolation

Resistance Value : 1k Ω to 25k Ω

Power : 250 W

Cable : Pig Tail Connection of HV Cable

Type : Ceramic Substrate, Ruthenium Deposited Resistor

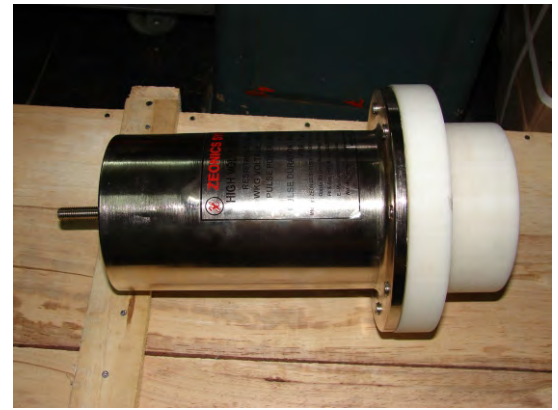
Type No. : Z/18/4/15



Resistor

5. Low Inductance Coaxial Load Resistor

Resistor Value : As Per Order Suitable to the Customer
Typical Value : 1Ω to 500Ω
Type : Solid Bulk Resistor; Wire Wound Resistors
Container : Coaxial Metal Container with Resistive Ground
Type No. : ZHS/001/082



6. High Voltage Pulse Resistor



Resistance Range : 50Ω to 1000Ω
Max Peak Current : 50kA
Max Energy : 10kJ
Application : As a Load For High Power Pulses Like Blumlein Marx, Capacitor Bank
Type : Non Inductive
Type No. : Z/21/117

7. High Voltage Modular Crowbar Resistor

Typical Voltage : $15\text{kV}/25\text{kV}/50\text{kV}/100\text{kV}/150\text{kV}$
Typical Values : 1Ω to 10Ω / 20Ω to 100Ω
Resistor : Bulk Ceramic Resistor or Wire Wound
Temperature : -20°C to $+85^\circ\text{C}$
Type No. : ZHS/001/084



8. High Voltage Low Inductance Resistors



Working Voltage : 50kV / 100kV / 400kV
Peak Current : Max 100kA
Resistance Value : 10 Ohms / 25 Ohms / 50 Ohms
Connector : Coaxial Metal
Type No. : Z/34/112

Resistor

9. High Voltage Resistor 1000 Mega Ohm 100kV DC

Resistance : 1000 Mega ohm \pm 2%
Working Voltage : 100kV DC
Max Voltage : 150kV DC
Environment : Gas /Oil/Moulding
Dimension : L = 300mm
 B =100mm
 T = 30mm
Type No : Z/47/44



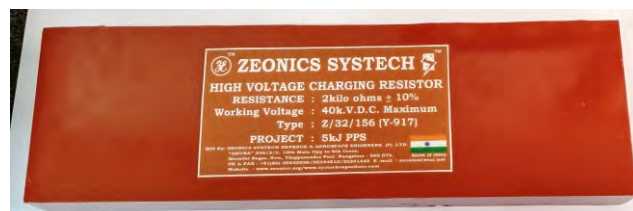
10. High Voltage Resistor 500mΩ 100kV DC



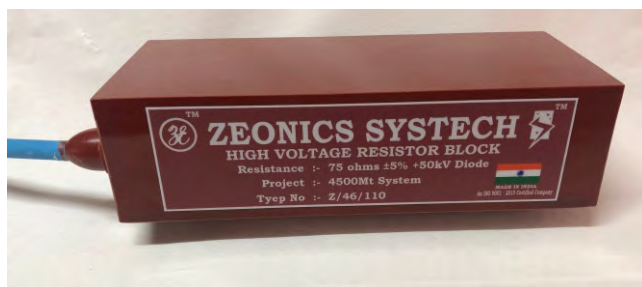
Resistance : 500 Mega Ohm \pm 10%
Working Voltage : 100kV
Test Voltage : 200kV
Type : Cylindrical Form Fit Type
Type No : Z/38/66

11. High Voltage Charging Resistor 2kΩ 40kV DC

Resistance Value : 3.0kΩ \pm 10%
Working Voltage : 40 kV
Type No : Z/32/156 Y-917



12. High Voltage Resistor Block 75Ω



Working Voltage : Maximum 40 kV DC
Application : Reverse Bias Protection
Temperature : -20°C to +85°C (Operating)
 : -30°C to +85°C (Storage)
Altitude : 4500 Mtrs Above Sea Level
Resistor Value : 75 ohms \pm 5%
Type : Z/46/110

13. Bleeder Unit 50kV DC

Typical Bleeder with Cooling
Working Voltage : 37kV DC
Test Voltage : 40kV DC
Isolation : 50kV DC
Type No : Z/37/48



Resistor

14. High Power Resistor ZHS PR300

Resistance Range : 1Ω to 200 Mega Ohms

Tolerance : ± 1%, 5%, 10%, 20%

Temperature Coefficient : 200ppm / °C

Max Operating Temperature : 350°C

Atmosphere : Gas, Cooling & Oil

This Resistor is a High Power Density, High Temperature Resistor with Excellent. HF Characteristics, Anti-Moisture, Anti-pulse, High Stability, non-inductive one with a wide Range of Resistance Values.

These Resistors can be used for Radar System Frequency Converter, Broadcasting Transmitting Devices, for High and Medium Frequency Devices, for Different Terminator and Voltage Dividers.



15. High Voltage Pulse Resistor 500kV



Resistance Value : 1Ω to 20Ω

Working Voltage : 500kV Pulse

Max Current : 65kA

Weight : Typically 120Kgs

Length : 800mm

Diameter : 350mm

Termination : M16

Insulation : Oil Filled Containers

Pulse Power : 30 Giga Watt for Few Nano Second

Type No : Z/49/84

16. Modular High Voltage Resistor 3kΩ

Value : 3kΩ ± 10%

Working Voltage : 100kV Pulse Voltage

Project : 1MV Marx

Application : Marx Charging

Type No : Z/36/70



17. High voltage Resistor Insert



Working Voltage : 50kV to 200kV DC/200kV DC to 400kV DC

Resistor Range : Ohms, Kilo ohms, Mega ohms, Giga ohms

Type : Wire Wound, Metal Oxide, Carbon Resistor, Bush Ceramic

Insulation : Gas Filled & Cooled, Oil Filled & Cooled

Dimensions : Min 75mm dia & Length of 200mm

Max 800mm Dia & Length of 1200mm

Type No : ZHS/001/081

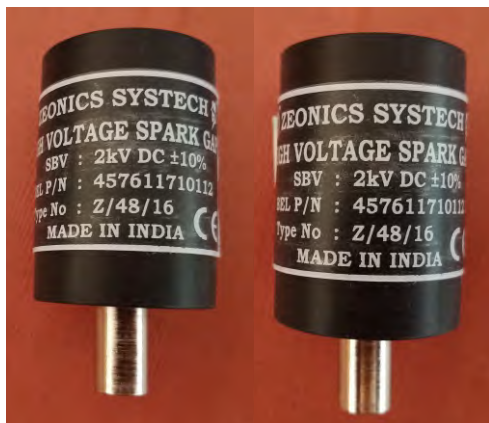
Spark Gap / Ignition System / Launcher

1. High Power Rail Gun Various

Velocity : $\geq 350\text{m/sec}$
Voltage : 3kV DC
Energy : 18k Joules / 50kJ/100kJ
Type No : Z/39/124



2. High Voltage 2- Terminal Spark Gap



Working Voltage : 400Volts DC
I Peak : 2kA
Type No : Z/48/14, Z/48/16

3. High Voltage 18kV 2 – Terminal Spark Gap

Operating Voltage : 2kV DC $\pm 10\%$
I Peak : 10kA Maximum
Type No : Z/48/22



4. High Voltage Triggered Spark Gap 25kV



Type : Trigger Gap
SBV Voltage : 25kV
Control : 11kV to 20kV
Peak Current : 20kA to 50kA
Application : Lithotripsy, Radar Pulser, Crowbar, Power Switching
Other voltage range : 3kV to 200kV Available
Type No : Z/28/153

5. Triggered Spark Gap 10kV

SBV : 10kV DC $\pm 7\%$
IPK : 5 kA
Type No : Z/40/112



Spark Gap / Ignition System / Launcher

6. High Voltage Spark Gap 75kV

SBV : 75kV \pm 10%
Control : 25kV to 56kV
I_{peak} : 25kA
Rise time : \approx 30ns
Type No : Z/49/19



7. High Voltage HA Spark Gap 18kV DC



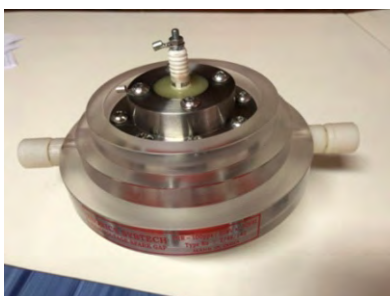
Working Voltage : 18kV DC \pm 10%
Max Current : 20kA
Altitude : 4500mt at - 30 $^{\circ}$ C / 9100mt at -40 $^{\circ}$ C
Temperature : - 20 $^{\circ}$ C to +85 $^{\circ}$ C
Type No : Z/50/01, Drg No: 6218

8. High Voltage Spark Gap 6kV

SBV : 3kV, 4kV, 5kV, 6kV
Tolerance : \pm 7%
I_{Peak} : 10kA / 50kA
Life : Max 50 Coulomb life to 55 Coulomb
Construction : Trigratron
Type : Z/46/03 / AMJI



9. High Voltage Spark Gap 25kV to 100kV



Working Voltage : 25kV to 100kV
Max Current : 12kA Single shot, 1kA / 1kHz
PRR : Max 1kHz
Working Pressure : 100psi SF₆ + Nitrogen stored or flowing 20psi SF₆
Operating Temperature : 20 $^{\circ}$ C to 65 $^{\circ}$ C
Electrode Dimension : Tungsten / steel
Type No : Z/46/142

Spark Gap / Ignition System / Launcher

10. High Voltage Spark Gap Based Crowbar System

Type	: Spark Gap Based Variable Crowbar System
Voltage (Variable)	: 8kV – 60kV
Working Voltage (max)	: 100kV
Peak Current	: 200kA
Energy	: 20kJ, Single shot
Pulse Width	: Lesser Than 10us for Crowbar Action Bringing Down High Voltage to Lesser Than 1kV
PRR	: 1ppm
Capacity	: 100kV (Max)
Type No	: Z/51/62



11. High Voltage Spark Gap Module (High Altitude)



SBV	: 65kV±7%
I Peak	: 10kA
Altitude	: Max 5800mt Also See Level
Life	: ≥ 50,000 shots
Mounting	: Any Horizon
Temperature	: Time Pressure Time ≈ 300nsec at 80% of SBV
Control	: 39kV to 52kV Max
Type No	: Z/47/48

12. Variable High Voltage Spark Gap 25kV

Working Voltage	: 5kV to 25kV
I Peak	: Max 5kA
Project	: PFN
Type No	: Z/33/51



13. High Voltage Spark Gap 10kV - 35kV

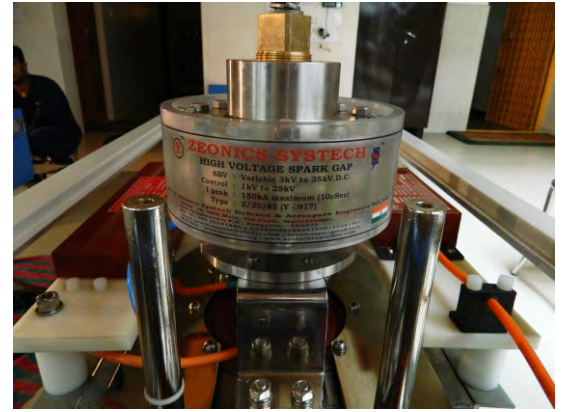


Working Voltage	: 10kV to 35kV Range
I Peak	: 20kA
Max PRR	: 3PPS at 2kA
Energy	: Max 0.5μF at 30kV DC
Application	: Kidney Stone Breaking Machine, Laser Firing Sets, etc.,
Switch	: Trigatron
Trigger	: 20kV Voltage
Type No	: ZE/3T/10, Z/46/01

Spark Gap and Rail Gap

14. High Voltage Spark Gap SBV 3-35kV

Control : 1kV to 25kV
Self-Breakdown Voltage : Variable from 3kV to 35kV DC
Peak Current : 150kA Maximum (16 μ s P.W.)
Energy : max 20kJ
PRR : 5ppm
Pressure : Nitrogen / SF₆ Gas
Type No. : Z/32/85



15. High Voltage Spark Gap SBV 60kV-120kV



SBV : 60kV at 50psi, > 90kV at 100 psi, \approx 120kV
Peak Current : 10kA Maximum, Single Shot / 1kA Max at 10pps
Gas : Nitrogen / SF₆
Type No. : Z/30/58 (852)

16. Coaxial 50 Ω Spark Gap for Metal Tube Insertion

SBV : 90kV DC, Control 25kV to 72kV DC
Peak Current : 10kA
Typical Rise Time : <30ns
Pressure : 35psi, 43kV SBV
Gap : 4mm
Type No. : Z/33/138



17. High Voltage High Current Spark Gaps \sim 400kA



Working Voltage : 20kV, 30kV, 40kV
Peak Current : 150kA to 400kA
Pulse Width : 100 μ s to 420 μ s
Energy : 10kJ, 20kJ, 50kJ
Dimensions : Diameter = 250 to 350mm
Height = 150 to 200mm
Type No. : Z/32/85 (917)

Spark Gap and Rail Gap

18. 10kV – 50kV DC Rail Gap

Working Voltage : 10kV DC to 50kV DC
Peak Current : 500kA Typical Maximum
PRR : 1 ppm Maximum at 500kA
1 ppm Maximum at 750kA (Flushing)
Charge : Max 20C Charge Transfer
Type No. : Z/34/60 (746)



19. High Voltage Triggered Spark Gap SBV 10kV



Current : 6 kA to 9 kA
Peak Current : 16 kA (Non-Repeatable)
SBV : 10 kV \pm 7%
Transformer Input : 300V Pulse
Transformer Output : 10kV Pulse
PRR : 1ppm
Max Pulse Width : 600 μ s Per Shot
Coulombs : 0.02C/Discharge
Type : Vacuum Gas Filled Trigratron
Dimensions : Diameter : 65 mm; Length: 100mm
Atmosphere : Oil / Air / SF₆ / Nitrogen
Type No. : Z/33/196 (10 kV)

20. Variable Electrode, Variable Pressure Spark Gap

Working Voltage : 300kV Pulse Maximum
Peak Current : 5kA / 25kA / 50kA
Pressure : 20 Bar, Maximum 290 psi
Pulse Width : < 50 ns
Gap : 0 to 10mm Adjustable
Type No. : Z/31/72 (870) Electrode



21. Variable Voltage 2 Terminal Spark Gaps



Operating Voltage : 6kV DC to 11kV DC
Peak Current : Typically 5kA / 10kA
Gas : Nitrogen filled Atmosphere
Type No. : Z/29/65(823)

Spark Gap and Rail Gap

22. High Voltage Gas Filled Spark Gap Trigatron

SBV : 60kV to 130kV (Pressure Controlled)
Control : 50kV to 95kV
Peak Current : 10kA
Max Pressure : Nitrogen at 50psi or SF₆ at 30psi
Trigger Voltage : 20kV Pulse Maximum
Type No. : Z/28/92 (731)



23. High Voltage Nuclear Hardened Spark Gap Switches



Working Voltage : SBV 40kV DC
Test Voltage : 50% to 80% of SBV (20kV to 32kV)
Peak Current : 20kA max
Temperature : -20°C to +85°C
RH at 40°C : 95%
Neutron Capability : max 1x10⁹ flux Neutrons
Peak Current : 25kA
Type No. : ZE/3T/40

24. High Voltage Isotope Treated Low Jitter Spark Gaps

Self-breakdown Voltage : 5, 10, 15, 20, 25, 30, 40kV
Control Required : 40% of SBV to 80% of SBV
Peak Current : 5kA / 10kA
Trigger Required : 10kV Trigger Required
Type No. : ZHS/001/093



25. Low Inductance High Voltage Spark Gap



SBV : 180kV at 100psi
Typical Rise Time : < 5ns at 100psi
Gas : Nitrogen
Type No. : Z/30/58

Spark Gap and Rail Gap

26. High Voltage 3 Terminal Spark Gap for Coaxial Fixing

Working Voltage : SBV 120kV DC \pm 7%
Control Voltage : 60kV to 96kV DC
Peak Current : 30kA Maximum
Trigger Pulse : 30kV to 40kV at 1 Joule
Medium (Insulating) : Oil / Air/ Compressed Gas
Type No. : Z/15/4



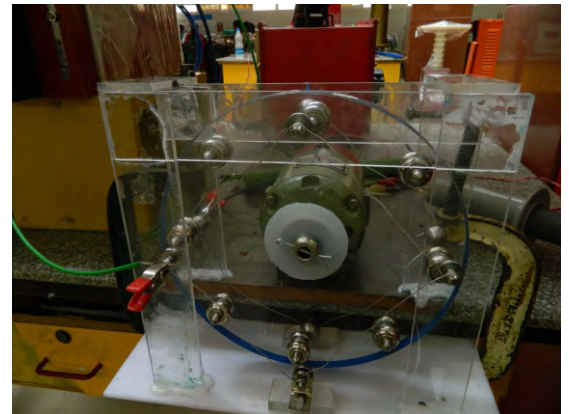
27. High Voltage Demonstration 100kV 3 -T Spark Gap Assembly



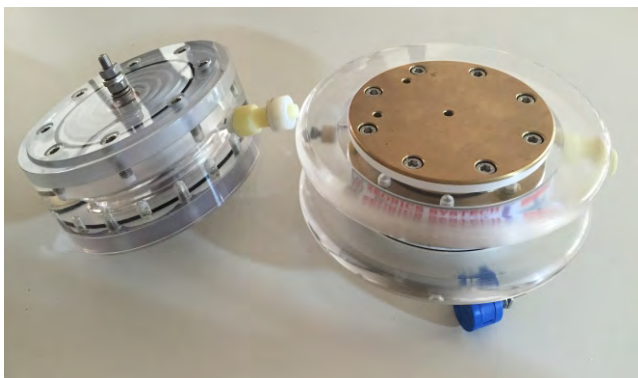
Working Voltage : 10kV to 100kV
Trigger Generator : Input 230V, 50Hz, 1 Phase, Output 1kV
Trigger Transformer : Input 1kV; Output 40kV Pulse
Decoupling Capacitor : 500pF /100kV
Type : Open Execution Spark Gap
Type No. : Z/14/147

28. Rotational Spark Gap

Voltage : Max 100kV
Max Current : 20A / Pulse
Max PRR : 30 pps to 200 pps
Electrodes : Tungsten, Alkonite
Motor Speed : 1500 rpm (Variable)
Type No. : ZHS/01/61



29. Field Distortion Spark Gaps



SBV : 25kV to 100kV
Control : 30% to 80% of SBV
Peak Current : 30kA to 100kA
PRR : 10kA \rightarrow 50pps; 100kA \rightarrow 1ppm
Gas Flow : N₂ /SF₆ at 25Lps to 50Lps
Electrodes : Copper Tungsten
Gas purging : Every Few Shots When at 30kV
Type No. : Z/37/58, Z/40/88

Spark Gap and Rail Gap

30 . High Voltage 3 Triggered Spark Gap



SBV : 100kV to 120kV DC
Control Voltage : 60kV to 90kV DC
Peak Current : 20kA
Trigger Voltage : 15kV Max
PRR : 1pps Max
Type No. : Z/3T/100, Z/40/102

31. High Voltage Firing Set Spark Gap

SBV : 8kV DC
Control : 3.5kV to 6.4kV
Peak Current : 10kA
Life : 1000 Shots at 10kA; 10,000 Shots at 1.8kA
Application : Detonation Sets
Type No. : Z/42/114



32. Multi-Channel (6) Rail Gap Gas Management System



Pressure : Max 50 psi
Display : Analog + Digital
Ports : 6 Nos.
Type No. : Z/34/79

33. Adjustable High Voltage Spark Gap

SBV in Air : Module 15kV to 45kV DC
Peak Current : 20kA Maximum
Pressure : 50psi N₂ for 150kV SBV
Type No. : Z/31/111



Spark Gap and Rail Gap

34. Variable Voltage Trigatron Switch 10-20kV

Variable SBV : 10kV to 25kV DC
Control Voltage : 5kV to 20kV DC
Gas : Nitrogen, SF₆, Argon
Type No. : Z/30/73 (832)



35. High Voltage Trigatron Switch 20-100kV



Working Voltage : 20kV DC to 100kV DC
PRR : Max 100pps
Peak Current : Max 1kA at 100pps, Max 5kA at 5pps, Max 10kA at 1ppm
Gas : Hydrogen, Nitrogen, SF₆
Type No. : Z/27/4

36. Hydrogen Gas Based Trigatron Switches 100kV

SBV : 100kV DC
Control : 40kV to 80kV Pulse
Peak Current : 35kA
Max PRR : 100Hz at 1kA/Pulse
Pressure : 100psi
Gas : Hydrogen/Nitrogen/SF₆
Type No. : ZHS/001/092



37. High Voltage Floating Spark Gap



Input : ON Board Batteries 24V DC
Output : Pulser Trigger Source for Triggering Spark Gap
Spark Gap : 200kV Spark Gap Suitable for 200kA
Application : Air Borne Application and Testing of 200kV/200kA Pulses on wind Mills
Type No. : Z/36/18

Switches

1. Pulse Power Pneumatic Crowbar Module

Working Voltage	: 50kV DC
Test Voltage	: 60kV DC
Peak Current	: Max 40kA (No Resistor)
Pressure	: Max 30 psi Dry Air
Crowbar Resistor	: 5k Ω /10k Ω /20k Ω
Type No.	: Z/34/65



2. Pneumatic High Voltage Safety Switch 50kV DC



Working Voltage	: 50kV DC
Test Voltage	: 65kV DC
Operational Pressure	: Max 30 psi Air
Type	: NO / NC or 2NO / 2 NC
Type No.	: Z/34/65

3. Pneumatic High Voltage Switch 50-150kV DC

Input Voltage	: 230V 50Hz or 12 V Battery
Output Voltage	: 50kV, 100kV, 150kV
Isolation	: Level 60kV, 120kV, 200kV
Air Pressure	: 40psi
Contacts	: Alkonite/Tungsten
Type No.	: Z/33/28

Please note the Switches can be Custom Built. In case you Require Different Input, Output or Configuration, Please Feel Free to Contact us.



4. High Voltage Dump Switch



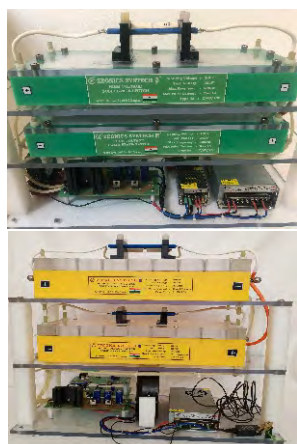
Working Voltage	: 0.5kV to 30kV DC
Peak Current	: 100 kA
Atmosphere	: Air/SF6/Nitrogen
Operating Pressure	: Max 20 PSI
Type No	: Z/50/28

5. High Voltage Solid State Switch 60kW

Working Voltage : 60kV
Test Voltage : 70kV
Max Frequency : 20kHz
Max Pulse Current : Max 6A
Power : 3000watts
Type No : Z/46/82



6. High Voltage Modulator Switch Compact Version 40kV



Input : 12V pulse /20A & Variable frequency
Working Voltage : Up to 40kV
Test Voltage : Up to 50kV
Output Frequency : 1Hz to 30 kHz
Output Voltage : Up to 40kV
Max Current : Max 1Amp
Power : 3kW to 10kwatts
Application : To pulse up to 40kV DC at a variety of frequencies
Type No : Z/45/150, Z/45/129, Z/46/82

7. High Voltage Switching Module 10kV

Input Voltage : 230V 60Hz
Commands : a) Manual
 : b) +5V TTL Pulse
 : c) Fiber optic Pulse
Output (Typical) : 37kV DC to 40kV DC
Control Voltage : 30kV DC to 42kV DC
Peak Current : 10kA
Type No : Z/32/134



8. High Voltage Pneumatic Switch 20kV 30kA



Working Voltage : 20kV DC
Test Voltage : 30kV DC
Operating Pressure : 30 to 60 PSI
Maximum Current : 30kA
Type No : Z/30/76

Transformer

1. High Voltage Pulse Transformer 50kV

Input : Maximum 800V Pulse
Output : 40kV Pulse
Isolation : 50 kV DC (1 Minute)
Rise Time : 800ns
Type No : Z/20/52



2. High Voltage Isolation Transformer 50kV DC



Primary : 0, 210, 220, 230, 240V
Secondary : 230 Volt at 5.0A
Power : 1150VA 10,000VA
Current : 5.0A
Isolation : Pri to Sec – 50kV DC
 Sec to Core – 50kV DC
 Pri to Core – 5kV DC
Type No : Z/38/80

3. HV Trigger Transformer 800 Volts to 35kV

Working Voltage : 800 Volts Pulse
Maximum Input : 900 Volts pulse
Typical Input : 800 Volts pulse
Isolation : 50kV DC primary to Secondary
Rise time : 10 to 90% is 600 to 700nSec
Output : Approximately 35kV to 40kV Pulse
PRR : Maximum 10 pulse / minute
Maximum Energy : 10 Joules
Type No : Z/18/147/148



4. HV Trigger Transformer 600 Volts to 20kV



Working Voltage : 600 Volts Pulse
Maximum Input : 700 Volts pulse
Typical Input : 600 Volts pulse
Isolation : 50kV DC primary to Secondary
Rise time : 10 to 90% is 60nSec to 95nSec
Output : Approximately 20kV to 25kV Pulse
PRR : Maximum 30 pulse / minute
Maximum Energy : 15 Joules
Type No : Z/32/55

5. High Voltage Isolation Transformer 100kV DC

Primary : 230volts 50Hz
Secondary : 230volts 50Hz
Power : 1000VA, 2000VA, 3000VA
Isolation : Pri to Sec – 40kV DC/ 70kVDC/100kV DC
 Sec to Core – 40kV DC /70kV DC/100kV DC
Type No : Z/42/102



Transformer

6. Wide Band Current Transformer 1V/A and 0.5V/A

Sensitivity : 1V/A \pm 3%
Max Peak Current : 500A
Type No : Z/49/132
Versions : BNC and SMA Available



7. High Voltage HF Transformer 42kV AC



Input : Max 84 Volts (RMS)
Output : 42kV AC RMS (Max)
Power : 10,000 VA (10kVA)
Type No : Z/42/14

8. High Voltage Pulse Transformer 100Hz 40kV Pulse

Input : Max 1kV
Output : 40kV Pulse
PRR : 100Hz
Type No : Z/48/46



9. High Voltage Transformer 25kV AC



Input : 0, 200V, 220V, 230V
Output : 25kV AC at 45mA
Power : 1125VA
Duty : Continuous
Container : Stainless Steel
Oil : Mineral Oil
Temperature : - 20° C to + 55° C
Maximum : 85° C
Type No : Z/49/124

10. High Altitude Isolation Transformer

Primary : 0, 230 volts, 50 Hz Single ϕ
Output : 0 volts, 100volts @ 3A
Isolation level : Typically 60kV DC test 72kV AC
High Altitude : Typically 5000meters above sea level
Leakage Current : Primary to secondary maximum 50 μ A
Secondary to core maximum 50 μ A
Weight : Typically 16 kilograms
Temperature : -20°, -30° to + 55°
Shock and Bump : Typically 5G
Type No : Z/47/74



Transformer

11. High Voltage Pulse Transformer 1:50 WITH 100kV Isolation

Input : 1kV Pulse
Output : \approx 50kV Pulse
Energy : \approx 20 Joules
Isolation : 100kV to 120kV DC
Type No : Z/49/28



12. High Voltage Isolation Transformer 40kV DC



Input : 230 Volt 50Hz 1 ϕ
Output : 230 Volt 50Hz
Power : 2.5kVA/5.0kVA
Isolation : Primary to Secondary 40kV DC
Secondary to Core 40kV DC
Type No : Z/48/178

13. High Voltage Pulse Transformer 40kV & 80kV Pulse

Input : 1kV Pulse
Output : 40kV Pulse / 80kV pulse
Primary : Max 1kV pulse requirement
Pulse Width : 4 to 10 μ s
Power : Average - 5000 watts
Max Frequency : 5 kHz to 15kHz
Type No : Z/46/146, Z/47/68



14. High Voltage Pulse Transformer 35kV / 40kV



Input Voltage : Max 400V/600V Pulse
Output Voltage : \approx 35kV/40kV
Rise Time : \leq 500m
Max Energy : \approx 10 Joules
Type No : Z/35/118/119

15. High Voltage Pulse Transformer 60kV

Input Voltage : 10kV Pulse at 3 μ F
Output Voltage : 60kV Pulse across 3000pF
Max Input Current : 3000 A
Max Output Current : 350 A
Type : Z/45/140



Transformer

16. Trigger Transformer

Trigger Voltage	: upto 25kV
Fast rise time	: Pulses up to 30kV/ μ s DC
Isolation	: 35kVDC
Polarity identification	: positive or negative pulses can be obtained by appropriate connection

ELECTRICAL AND PHYSICAL CHARACTERISTICS

Input Voltage	: 550V
Input energy	: 250mJ
Secondary open circuit voltage (Peak)	: 25kV
Rate of rise of output voltage	: 25 -30 kV/us
Pulse repetition rate	: 10pps
Output current (peak)	: 1.0A
Voltage transformation ratio	: - 50:1
Type No	: Z/28/161



17. High Voltage Pulse Transformer 45kV Pulse



Input	: 5 kV
Output	: 15 kV Pulse
Input capacitance at primary side	: 4 μ F/10kV
Load capacitance at secondary side	: 12 nano-Farad
Output pulse rise time	: (with 12 nanofarad load) 4.4us
Output pulse duration	: (with 12 nanofarad load) 6.4us
Primary peak current	: 2.24kA
Secondary peak current	: 116A (First peak)
PRF	: 10 Hz
Turn ratio	: 1:10 S
Weight	: 3kg
Size	: Height 350 , OD=89, ID= 23
Type	: Z/46/120

18. High Voltage HF Transformer 20kHz

Input	: 450 Input AC 20 kHz
Output	: 46 kV AC 20 kHz at 260mA
Power	: 12 kW
Duty	: Continuous
Type No	: Z/42/14/156/161



19. High Voltage High Pulse Transformer (ASU) 8.5kV



Input	: 540Volts Pulse
Output	: \geq 8.5kV Pulse
Isolation	: 70kV DC (1min)
Project	: Compact (TLR System)
Type No	: Z/47/150

Transformers

20. High Voltage HF Isolation Transformer 400Hz



Input : 200 Volts 400Hz
Output : 200 Volts 400Hz
 : 100 Volts 400Hz
 : 12 Volts 400Hz
Type No : Z/48/55
Dimension : L=70mm x B=27mm x W=57mm
Weight : 300 gram

21. High Voltage Isolation Transformer 1.3V & 3V

Input : 220V/400Hz
Output : 1.3 Volts + 3 Volts
Application : Magnetron
Type : Z/50/120



22. Compact Isolation Transformer 90VA 4kV DC



Input : 230 Volts \pm 10%
Output : 15V – 0 – 15V at 3A
Isolation : 4kV DC
Power : 90V A
Type : Z/49/122/A

23. High Voltage Isolated DC Platform 2kVA 200kV DC

Input Voltage : 230V 50Hz single phase 2kVA
Output Voltage : 230V 50Hz Single phase Multipoint
Isolation : Primary to secondary typically 200kV DC
Leakage Current : less than 50 μ A at 200kV
Typical Pulse Isolation : 300kV Pulse
Typical Applications : Isolated Platforms for oscilloscopes and other equipment giving full isolation between input and output system
Type No : Z/44/26



24. Step Up Moulded Transformer 500V Multi output

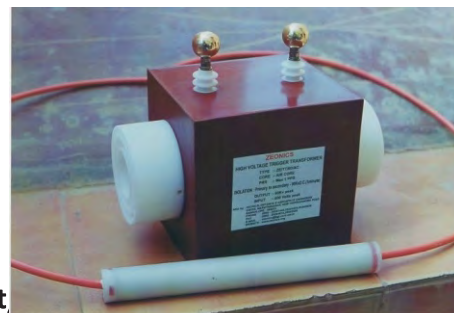


Primary : 220/50Hz
Secondary : 0-480V-490V-500V
Output Current : 20mA Max
Type : Z/50/105
Isolation : Primary to Secondary - 20kV DC

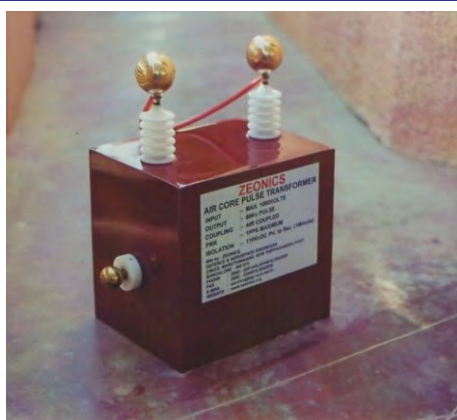
Transformers (Pulse + Trigger)

25. Air Based Multi Primary Transformer for 60kV Pulse

Input Voltage : Max 600V Input
Output Voltage : Max 60kV Pulse
Isolation : 90kV DC
PRR : Max 1 pps
Energy : Max 100 Joules
Temperature : -20°C to +85°C
Type : Air Core Primary Vacuum Moulded Epoxy Case
Type No. : ZE/TT/60/AC
Please Note the Values are Customisable. In case you Require Different Input Output or Configuration, Please Feel Free to Contact us.



26. Air Core Pulse Transformer 60kV



Input Voltage : Variable 200V to 800V
Output Voltage : 60kV Pulse
Isolation : 90kV Primary to Secondary
Energy : Max 50 Joules
Temperature : -20°C to +85°C
Type : Air Core, Oil Filled, Vacuum Moulded Epoxy Casted
Type No. : ZHS/001/063

27. High Voltage Pulse Transformer 15kV

Input Voltage : Max 400V Pulse
Output Voltage : 15kV Pulse
Max Pulse width : 2 μ s
PRR : 5pps
Temperature : -20°C to +85°C
Application : Laser / Spark Gap / Flash Lamp Triggering
Type : Ferrite Core Vacuum Moulded
Type No. : ZPT - 400



28. High Voltage Pulse Transformer 40kV



Input Voltage : 800V to 900V; Pulse 1 μ s to 5 μ s
Output Voltage : 40kV Pulse, Typically 38kV
Isolation : 50kV DC Primary to Secondary
PRR : 10 ppm
Energy : max 10 Joules
Temperature : -20°C to +90°C
Application : Laser / Flash Lamp / Spark Gap
Type No. : Z/20/34

Transformers

29. Nuclear Hardened High Voltage Pulse Transformer 100kV



Input Voltage	: Can be used for 200V to 800V
Output Voltage	: 100kV Pulse
Isolation	: 120kV DC
Energy	: 100 Joules
Temperature	: -20°C to +90°C
Max Neutron Flux	: 1 x 10 ¹¹ Neutrons
Type No.	: Z/30/112 (809)

30. High Voltage DC Isolation Transformer 100kV DC

Primary	: 0-230V, 240V, 50Hz, 1 Phase
Secondary	: 1390 V at 0.75A
Primary to Core	: 5kV DC
Isolation	: Primary to Secondary 100kV DC Core to Secondary 100kV DC
Leakage current	: ≤ 10μA at 100kV DC
Power	: 1050 VA to 11000VA
Type	: Z/34/102



31. High Voltage DC Isolation Transformer 30-80kV DC



Primary Input	: 230V – 50Hz 1 phase 10kVA maximum
Secondary Output	: 750V AC (Tap-1) 1160V (Tap-2)
Power	: 500VA to 10,000VA Range
Isolation	: 30kV /40kV /50kV /60kV /80kV DC
Type No.	: Z/27/144

Please note the values are customisable. In case you require different input, output or configuration, please feel free to contact us.

32. High Voltage Isolation Transformer 10kV-200kV DC

Input	: 230 V
Output	: 230 V
Power	: max 8kVA
Isolation	: 10kV to 200 kV DC
Regulation	: Typically 7%
Type No.	: Z/27/110 (731)



Transformers

33. High Voltage Transformer-less HV Unit 35kV DC

Primary Voltage : 25kV AC
Output Voltage : 35kV DC
Output current : 0.5A
Type : Oil Immersed Type
Type No. : ZHS/001/095



34. High Voltage Isolation Transformer 60kV DC



Primary Voltage : 0, 100V, 200V, 230V
Secondary Voltage : 100V, 3A
Isolation : 60kV DC (1 Minute) 72kV DC (Continuous)
Power : 300VA
Application : Floating Modulators, Radar, Ion Beam Platforms.
Type No. : Z/11/124

35. High Voltage Isolation Transformer 200kV DC

Input Voltage : 230 V, 50Hz, Single Phase
Output Voltage : 230 V, 50Hz, Single Phase
Isolation : Primary to Secondary – 200kV DC
Secondary to Core – 200kV DC
Primary to Core – 5kV DC
Power : 1kVA to 10kVA Available
Type No. : Z/36/96



36. Large HV Isolation Transformer 50kV DC



Input Voltage : 230 V, 50Hz, Single Phase
Output Voltage : 30 V at 75A
Power : 2250VA
Isolation : Primary to Secondary- 50kV DC
Primary to Core - 5kV DC
Secondary to Core - 50kV DC
Application : Magnetron, Klystron Filament Isolation Transformer
Type No. : Z/30/148 (864)

Transformers

37. Isolation Transformer Primary to Secondary Both Floating 70-250kV DC

Primary Voltage : Floating 230 V, 50Hz, Single Phase
Secondary Voltage : Floating 230 V, 50Hz, Single Phase
Power : 1kVA to 10kVA
Isolation : 70kV DC / 100kV DC / 250 kV DC
Type No. : ZHS/01/47



38. High Voltage Isolation Transformer for Magnetron Filaments 60kV DC



Input Voltage : 230V, 50Hz, 1 Phase
Output Voltage : 6.3V / 25A; 6.0V / 75A
Regulation : $\approx 9\%$
Isolation : Pri to Sec – 60kV DC
 Sec to Core – 60kV DC
 Pri to Core – 5.0kV DC
Temperature : -20°C to $+85^{\circ}\text{C}$
Type No. : Z/18/127

39. HV HF Transformer 200V

Input Voltage : 200V at 20kHz
Power : Typically 4.0kVA
Winding : All litz wire work
Core : All ferrite core
Type No. : ZHS/01/16



40. High Voltage High Frequency Transformer 10kV

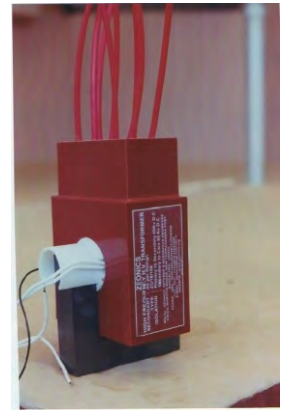


Input : 120V rms 20kHz with taps at 0, 120V, 140V
Output : 10kV rms at 20kHz
Power : 2250VA Continuous
Isolation : Primary to Secondary 35kV DC
Type : Oil filled sealed transformer for military use
Temperature : -20°C to $+85^{\circ}\text{C}$
Type No. : Z/23/35-38 (628)

Transformers

41. HV HF Transformer for Multi Turn Application 5kV

Primary : 100V rms 20 KHz
Secondary : 5000V rms at 20 kHz (Mul Sec on)
Power : 1kVA Continuous
Isolation : Primary to Secondary 80kV DC
Duty : Continuous Radar Duty
Type No. : Z/18/100



42. HV 100kHz Transformer



Typical Input : 100V rms
Typical Output : 20kV AC rms
Frequency : 100kHz
Ratio : 200:1
Power : 600VA
Core Type : U100
Type No. : Z/27/95

43. High Voltage Air Core Transformer 500kV

Input : 1kV Pulse at 140kA
Output : 500kV pulse $1\mu\text{s}$ to $10\mu\text{s}$
Power : 10kJ
Type No. : Z/27/143



44. 3 Phase HV Transformer 11kV AC



Input : 3 phase, 440 V Delta connected
Output : 3 phase, 440 V Delta connected
Power : 5kVA, 10kVA, 15kVA
Output Voltage : 11kV AC rms
Protection : Fuse protected secondary used with Glass cartridge fuses
Type No. : ZHS/01/45

Transformers

45. High Voltage High Frequency Transformer 26kV

Input : 247 V/20kHz
Output : 26kV rms
Frequency : 20kHz Square Wave
Power : 5kVA Max
Ratio : 105:1
Type No. : Z/41/98



46. High Current High Reliable Current Transformer



Current : Max 300A
Burden : 5VA
Frequency : 50Hz/60Hz
Accuracy : $\pm 2\%$ to 3%
Type No. : Z/43/01

47. Multi Output Isolation Transformer 20kV DC

Primary : 230 V 50Hz 1 \emptyset
Secondary : Multi output 100V, 200V,600V
Isolation : 20kV DC Isolation
Leakage Current : 100 μ A at 20kV DC
Frequency : 50Hz/200Hz
Type No. : Z/39/72



48. 200kV DC Isolation Transformer



Isolation Voltage : Pri to Sec - 200kV DC
Input : 0, 210V, 220V, 230V AC (Pri)
Output : 230V 50Hz 1 \emptyset (Sec)
Power : 5000VA, 8000VA, 10,000VA
Duty : Continuous Duty
Type No. : Z/44/01, Z/44/16

Transformers

49. Ferrite Core Based Pulse Transformer 8.5kV



Input : max 800 V pulse
Output : 8.5kV Pulse
Isolation : 15kV DC Primary to Secondary
Temperature : -30°C to +85°C
Type : Ferrite core, Oil Impregnated, Vacuum moulded, epoxy casted Transformer
Type No. : Z/20/36

50. Ferrite Based Pulse Transformer 80kV

Input : max 900 V Pulse
Output : 80kV Pulsed output
Isolation : Primary to Secondary 110kV DC
Material : Polymer Body
Application : Triggering Rail Gaps
Reliability : Highly reliable Transformer
Type No. : Z/25/54 (686)



51. High Voltage Plasma Torch



Working Voltage : 40kV AC at 20kHz
Gas : Nitrogen/Argon /Air
Type No. : Z/42/63

52. Weapon Based Pulse Generator Modules

Input : 24kV DC Batteries
Output : Pulse 30kV
Isolation : 40kV Primary to secondary
Rise time : 1μs
Dimensions : 110mm - 350mm length
Battery : 300 Shots Suitability Single Charge
Type No. : Z/28/128



Other High Voltage Assemblies & Systems

1. X- RAY Shield



Protection : for 60 keV X-Rays
Adaptation : Flexible type
Suitable : For so X-Rays
Material : Metal loaded silicone Rubber
Type No. : Z/35/108

2. High Energy 40kJ/100kJ System

Output : 15kV to 25kV Range
Energy : 15kJ to 120kJ System
Current : 100kA to 600kA Range
Type No. : Z/41/01



3. 11kV/33kV Surge Arrester



Rated Voltage : 11kV/33kV
Surge Current : 5kA or 10kA
8/20 μ s Lightning Impulse : 99kV

4. High Voltage Detonation Sets

Input : 24 V battery or 230 V, 50Hz, Single Phase
Output : Pulse of 50J/100J/250J/500J at 10kV DC/20kV DC
Energy : 1kJ at 30kV DC max
Type No. : ZHS/01/20



Other High Voltage and Assemblies

5. High Voltage Detonation Sets 50 Joules to 100 Joules

Input Voltage : 230V, Single phase, 50Hz or 12V/24V DC Operation
Output Voltage : High Energy Pulse of 10kV to 15kV at
Energy : 50 Joules to 100 Joules
Trigger : Manual or a +5 V Command.
Suitable : Dynamite, RDX and other Pyrotechnic/ Explosives
Type No. : ZE/FS/10/25-SMPS



6. High Voltage Pulse Power Disinfection System



Operating Voltage : 20kV to 40kV Stress at 50kV /cm
Cell measurement : Typically 1Litre/25Litres of Volume
Application : Sterilization of Medical Equipment
Type No. : ZHS/01/28

7. High Voltage 10kJ/ 20kJ Magna Forming Equipment

Max Voltage : 18kV DC
Energy : 20kJ/30kJ Available
Type : Magnetic Welder
Welding : Plastic to Metal
Type No. : ZHS/01/26



8. High Voltage High Energy Explosion Detonation Module



Working Voltage : 25kV DC
Test Voltage : 40kV DC
Energy : 1.5kJ
Fluids : Oil, Gas, Colloids (Explosives)
Application : For Testing of Bridge wire Explosives in a Controlled Atmosphere
Type No. : Z/21/7

Other High Voltage and Assemblies

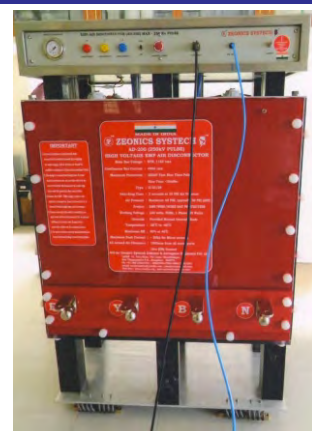
9. High Voltage Bridge Wire Exploding Chamber



Input : DC of 20kV to 50kV DC stored energy of 1kJ to 5kJ
Output : Pulse of 20kV to 50kV at 2kJ to 5kJ
Pressure : max 200psi of gas or vacuum of 730mBar
Type No. : Z/27/1 (710)

10. High Value Asset Protector

Voltage : 440V/1100A or 11kV/132A
Protection : 4 Way, 3 phase + Neutral
Protection Level : 200kV Impulse / ≤ 50 ns
Application : Protection from conducted EMP pulse upto 200kV
Type No. : Z/33/28



11. E-Field Detector (Quantitative) Detection



A pre-ionized gas-based E-field system which can detect electric fields which can occur in the atmosphere.
This can work up to very strong fields also of >50 kV/Meter.
Type No. : Z/30/59

12. Hand Held Electrospinning System

Output Voltage : 20kV DC
Material : PVA Based Dispensing Materials
Rate of dispersion : Adjustable by changing voltage
Coverage : Approx. 100mm x 100mm in 2 minutes
Type No. : Z/28/18



Other High Voltage and Assemblies

13. High Voltage Multiplier Cast Module



Capacitance : 2300pF / 20kV x 6 Nos.
Operating Frequency : max 100 kHz
Type No. : S/11/1

14. 500kV to 700kV HV Multiplier Assembly

Input Voltage : 25kV AC rms at 60kHz
Output Voltage : 500kV DC / 700kV DC at 1mA
Type No. : ZHS/001/099



15. Modulator based PFN for Pulsed Electric Field Systems



Voltage : 30kV to 150kV Output
Energy : 100 Joules to 2000 Joules
PRR : Max 200 Hz
Impedance : 5Ω to 2000Ω
Pulse : Rectangular Shape
Duration : 500ns to 500μs
No of Stages : 10 or 20
Application : Agriculture, Food Industry, Dairy, Modulator, Radar
Type No. : ZHS/001/058

16. High Voltage Blaster System

Input : 230Volts 50Hz, 1φ
Output : 180kV pulse at 2PPS
Rise time : < 10ns
Impedance : 50 Ω / 200 Ω Lines
Type No : Z/37/10



Other High Voltage and Assemblies

17. 100ms Pulse width, 20kV Output PFN (1Ω Impedance)



Working Voltage : 20kV DC
Test Voltage : 30kV DC
Pulse width : 100μs
Energy/Shot : 5kJ
Type No. : Z/34/42

18. 50Ω Impedance Pulse Forming Network

Input Voltage : 50kV DC
Output Voltage : 25kV across 50 Ohms
Pulse Width : 5μs to 100μs
Energy : 50 Joules to 200 Joules
Duty : Continuous duty
Type No. : S/17/140



19. High Voltage Compact PFN Oil and Moulded Version



Voltage : 5kV to 100kV DC
Current : 2 to 30A rms; 1 to 10kA Peak current
Pulse Width : 10ns to 100μs
No. of stages : 10 to 20 Stages
Impedance : 2Ω to 100Ω
The entire PFN are designed in open or moulded version as per current required.
Type No. : Z/01/35

20. Pulse Power Plasma Washer Gun

Input : 230V, 50Hz, 1 Phase
Output : PFN based pulses of 100μs duration and 15kV output
Peak Current : 2kA to 10kA maximum
Switch control : Spark gap based
Type No. : Z/27/28



Other High Voltage Protection Systems

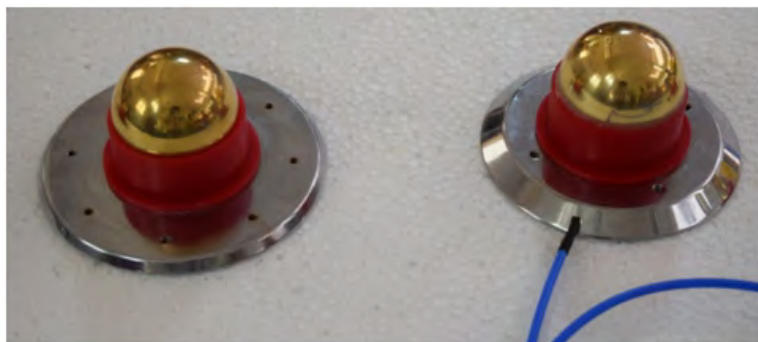
21. High Voltage Crowbar Module



Working voltage	: 20kV DC
Peak Current	: 20kA Max
Command	: +5 V / Manual
Duty	: continuous duty 24 hours
Application	: For Magnetron/Klystron/TWT/ Gyratron systems
Type	: Z/18/146

22. E-field Probe or Sensor

Max Field : 100kV/Meter
Rise Time : ≈ 1 n sec
Frequency : 1GHz
Ratio : 1kV : 22mV
 : 20kV : 440mV
Type No : Z/26/110 (E-field)
We also make B-field sensors and other designs
of E-field sensors (Z/36/154).



23. High Voltage Dielectric Breakdown Plasma Generator



Input	: 230V, 50Hz, 1 ϕ
Output	: 30kV at 40mA; 50kV at 25mA; 50kV at 40mA
Power	: 1200 watts
Application	: Generation of continuous plasma between a glass plate to extract the same
Plasma surface	: 300mm x 300mm & 600mm x 600mm Plasma systems
Type No.	: ZHS/001/088

24. Dielectric Plasma Generator

Voltage	: 50kV, 70kV Models
Power	: 5kW or 7kW
Operation	: Continuous
Voltage Plasma	: 1m x 1m x 25mm (Gap)
Type No.	: ZHS/001/059



Other High Voltage and Assemblies

25. High Voltage High Power Rotary Switches

kV / Stage : 25kV
Energy : max 3kJ
No of Stage : 10
Type : Sequential Switching System
PRR : max 200 rpm
Type No. : ZHS/001/067



26. High Voltage Test Setup for HV Laboratory



Input voltage : 230 V, Single phase
Output voltage : 0 to 200kV DC at 10mA
 0 to 100kV AC at 10mA
Metering : Analog kV meter/Digital kV meter HV Grid
 and safety lights
Type No. : ZHS/01/41

27. Compact HV Firing Module

Input : 28V DC Battery Minimum 10Ah
Output : Pulse of 5kV DC at 5 to 6kA
Command : + 5V DC and Manual
Application : Detonation
Type No. : Z/43/36 dimension



28. High Voltage Gas Management System for Marx, Rail Gaps and Spark Gaps



Type of gas : N₂, SF₆, AIR, Argon
Max Pressure : 100 psi/200psi
Control : 1psi to Full Pressure
Application : Marx Generators/Rail Gaps/Spark Gaps
Type No. : Z/30/78, Z/34/78

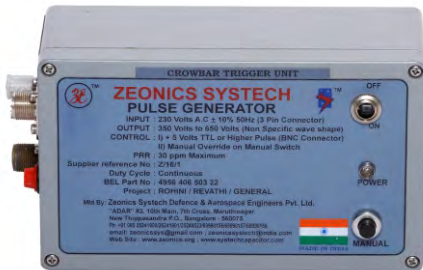
Others Items

29. Coaxial High Current Shunt 50Ω 10kA

Resistance : 0.05 Ohms ± 10%
 Peak Current : 10.0kA
 Typical Pulse : 1.2/50µs / 8/20µs
 Type No : Z/25/115 (672)



30. Pulse Generator Crowbar Trigger Unit 500V Pulse



Input : 230 Volts AC ± 10% 50Hz (3 Pin Connector)
 Output : 350 Volts to 650 Volts (Non Specific Wave Shape)
 Control : I) + 5 Volts TTL or Higher Pulse (BNC Connector)
 II) Manual Switch
 PRR : 30 ppm Maximum
 Duty Cycle : Continuous
 Type No : Z/16/1

31. High Voltage Trigger Transformer Module with 70kV Isolation

Input : 350 Volts to 650 Volts pulse (Non Specific)
 Output : > 8.5kV Pulse (Non Specific)
 Isolation : 70kV DC (1 Minute)
 Type No : Z/16/2/3



32. High Voltage Wire Guides



No of Ways : 2 ways or 4 Ways
 Voltage : 60kV DC
 Cable : Suitable for silicone cable
 Type NO : Z/48/116 , Z/48/117

33. Microwave 2.45GHz Source 800W

Input : 230Volt 50Hz 1φ
 Output : 2.45GHz 800W Continuous Power
 Angle : Typically 30°C Sweep
 Type No : Z/48/154



Others Items

34. High Voltage Cold Barrier Discharge System 50kV 50mA

Input : 230 Volt 50Hz 1 ϕ
Output : 0 to 50kV AC Corona Treater 50Hz
Power : 2500VA 5
Application : To generate cold plasma between electrodes
Type No : Z/49/6



35. Cold Barrier Discharge System with Reactor



Input : 230 Volt 50Hz 1 ϕ
Output : 50kV AC
Power : 2500VA
Reactor : Stainless Steel - Customisable
Dielectric : Air/Gas/Separation
Type No : Z/45/14

36 . High Current Primary Chokes (Tapped)

Operation Frequency : 4kHz, 5kHz, 10kHz, 25kHz, 100kHz
Core : Ferrite/Amorphous core/Ribbon Core
Insulation : Moulding Epoxy /Silicone Compact Core
Working Voltage : 10kV, 25kV,40kV, 50kV
Inductance : 25 μ H to 100mH -as per customer
Type No : Z/49/55



37. High Energy Crowbar Resistors



Resistance : 2.5 Ω /0.5 Ω
Working Voltage : 60kV DC
Type : Z/51/03
Max Current : 155 kA to 200kA

38. High Frequency \geq 100kHz Tesla

Input : 230 Volts 50Hz 1 phase
Output : HV/HV Tesla Sparks
Typically 40kV HF
Type : ZHS/Tesla/Imp/0010



Others Items

39. Pulse Current Injection System

Input voltage	: 230 volts, 50Hz, Single Phase or Battery operatable
Peak open circuit voltage	: 5kV to 60kV, positive only
Standards	: MIL-STD-188-125-1/2 short pulses
Source Impedance	: ≥ 60 ohm
Peak Short circuit current	: 1.2 kA
Rise time of SC current	: $20 \text{ ns} \pm 4 \text{ ns}$
Pulse length	: 500 – 550 ns
Charging Time	: < 1 min
Output connectors	: Connecting bar
Power rating	: 150 Watts
Type No	: Z/43/111
Working Temperature	: -10° C to 45° C
Storage Temperature	: -20° C to 50° C
Altitude	: Max 2000 meters above sea level



40. High Voltage CLC Unit



Current Control Component

Construction	: Inductance, Capacitance , Resistance
Type	: Tuned Component
Max Voltage	: 30kV DC
Type No	: Z/48/114

41. Plasma Guns

Input Voltage	: Typically 10kV to 20 kV Maximum
Input Frequency	: Typically 10 kHz to 20 kHz
Required Gas	: Argon @ 2 ltrs to 5 ltrs per minute
Plasma Torch diameter	: 25mm or 40 mm
Plasma flame	: 12mm diameter to 15 mm diameter
Plasma flame length	: up to 50 mm

1. Application Disinfection
2. Treatment of certain polymers and Chemicals
3. Organising polymerization into Materials
4. Treatment of different types of steels

For surface preparation

Type No : Z/42/73 , Z/42/72



Others Items

42. High Voltage Electro Spinning System

Input : 230Volt 50Hz 1Ø
Battery backup – 1 hour
Output : PVA Fibers
Voltage : 5kV to 20kV
Type No : Z/38/18



43. High Voltage Tesla Source 200W



Input : 230Volt 50Hz 1Ø
Output : Tesla Based 40kV/50kV
Peak to Peak System
Power : 200Watts/400Watts
Type No : Z/41/23

44. High Voltage Firing Sets for >2kA

Input : 230 Volts 50Hz 1Ø
Output : 3kV DC to 5kV DC Pulse
Energy : 9 Joules to 12.5 Joules
Peak Current : 2kA with 10mt Cable (Load line)
Type No : Z/47/18
Feature : Arm , Disarm



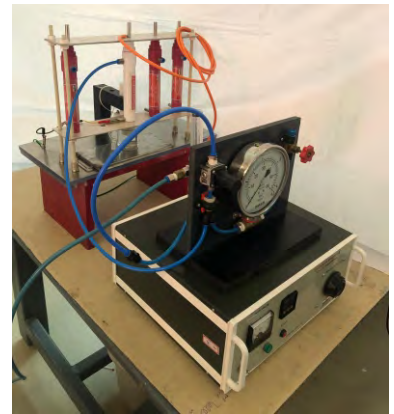
45. High Voltage High Current PEMF System / Medical Equipment



Input : 230V 50Hz 1Ø
Output : Magnetic Pulses of 4000 to 6000 gauss
Type No. : Z/47/111
PEMF therapy uses bursts of low-level electromagnetic energy to heal damaged tissues and bone, to relieve injury related pain, and even to stimulate organs. PEMF has been used to improve functions like :
Depression
Immune function
Rate of injury healing
Physical energy
Bone healing and density
Circulation

46. Plasma Water Plant - Mini Version

Input : 230Volt 50Hz 1Ø
Output : PAW- (Plasma Activated Water)
Frequency : 5kHz/10kHz/2kHz
Timer : Provided
PAW made per Lot : 50ml to 100ml
Type No : Z/41/23



47. High Voltage PFN System



Input : 2kV / 5kV / 10kV / 50kV
Output : Delay microseconds / milli seconds
Topograph : Delay Line
Frequency : 50 Hz to 50 KHz variable model
Current : 1 A / 30 Ass
Type No : Z/44/100

48. HV Firing Unit (Two in One) For Explosives

Input : 230V 50Hz
Output voltage : 3kV to 5kV (Variable by knob)
Output current : $\geq 2\text{kA}$ (@ 3kV voltage & 10m long HV Cable)
Response time : $\leq 1\mu\text{s}$
Rise time of output current pulse : $\leq 1\mu\text{s}$ (@ 2kV voltage & 10m long HV Cable)
Jitter : $< 100\text{ns}$
Polarity : Positive
Chassis Ground : Yes
Trigger In : a) Manual, b) +5V Rising edge
Trigger out : +5V TTL
Control switches & indicators for : LED indicator for Power ON, Charge, Arm, fire
Digital display for charging voltage : Yes read out
Power input : 230V AC $\pm 10\%$, 50 Hz
Operating Temperature : Maximum 50°C
Mounting : In 19" Rack
Safety : a) Safe & quick disarm switch function
 : b) safety control with interlock
 : c) Short circuit protection

Weight : $< 5\text{ Kg}$
Type No. : Z/43/36



Others Items

49. HV Barricade Light

The high voltage cordon off lights are made of square stainless stem with a suitable castor wheel arrangement at the bottom. The HV light are used to indicative areas where high voltage is present & they have a red colour flashing light as well as HV indications.

Operating voltage shall be 230 volts / 50Hz These are individually switchable with toggle switch & can be switched ON or switched OFF,

Height : 1000 mm

Base : 230 mm Diameter

Weight : 6.8 kg

Type No : Z/45/13



50. (PEMF) Pulsed Electromagnetic Field



Input : 230V 50Hz 1 \emptyset
Output Field Frequency : 1Hz to 25kHz
Max Voltage : 12V Pulse
Max Current : 20A pulsed current
Application : To fire into a core to generate a Pulsed electromagnetic field
Type No : Z/46/102

51. High Voltage High Frequency Hydrophobicity Tester for Silicone Mats

Input : 230 volts, 50 Hz, Single Phase
Output : 9 to 40 kV AC at High frequency (5.6kHz)
Test Gap : 2mm to 3mm maximum
Area : Electrode Area 25mm x 25mm = 625 Sqmm
Duration : Maximum on duration 3 minutes at 20 kV
Plate Dimension : \geq 250mm x 250mm
Electrode Profile : Flat surface for Silicone mat
Type No. : Z/41/23



52. Pulse Power Shock Wave Generator with Shock Wave Tube



Input : 230V, 50 Hz, 1 Phase
Output : Variable 5kV to 30kV at maximum 100 kA
Power : 2500 Joules up to 150kJ
Frequency : Maximum 30 Pulse / Hour
Dimensions : 1.2 mtr x 1.2 mtr x 1.2 mtr
Weight : 240 Kg
Type No. : Z/46/12

Others Items

53. PEF Pulsed Electric Field Generator

For Solid & Liquid Food Processing & for Surface Finish Application

- Input : 230V, 50 Hz, 1 Phase, 50 Hz
- Output : 5 kV to 40 kV at high frequency
- Power : 1000 watts / 2000 watts version
- Frequency : 1Hz to 20kHz
- Dimensions : 1.5 mtr x 1.2 mtr x 1.2 mtr
- Weight : 200 kg with application cell
- Field strength : 5 kV /cm to 40 kV / cm
- Type No. : Z/45/118



54. Audio Frequency Power Amplifier



- 100 Hz to 20 kHz for ohm heating of Food
- Input : 230V, 50 Hz, 1 Phase (Power)
- : Signal input 2 volts
- Output : 25Volt/40A
- Power : 1000 watts
- Frequency : 100 Hz to 20 kHz
- Dimensions : 1.2 mtr x 1.2 mtr x 1.0mtr
- Weight : 130 Kg
- Type No. : Z/46/106

55. CBD (Cold Barrier Discharge) Cold Plasma Generators

- Input : 230V, 50 Hz, 1 Phase
- Output : 0 to 50kV AC at 50mA
- Power : 2500 VA and 5000VA Modules
- Frequency : 50 Hz
- Dimensions : 1.2 mtr x 1.2 mtr x 1.0 mtr x 2 Units
- Weight : 350 Kg with application cell
- Type No. : Z/45/19



56. Conveyor Based PEF System



- Input : 230 volts, 50 Hz, Single Phase
- Output : Variable speed feeder
- Material movement : > 100 Kg / minute
- Output : 20mm to 50mm gap
- : PEF ≈ 2kV to 10kV /mm
- Maximum Load : 50 Kg / Tray
- Maximum Trays : 3 Trays at one time
- Type No. : Z/49/112

Others Items

57. High Voltage PFN Module

No of Stage : 10 Stage
Application : Radar Pulser
Operating Voltage : 2kV, 5kV/10kV/25kV/50kV
Pulse Width : 2μsec to 100μsec



58. Trigger Generator with Isolation of 100kV D.C.



Input : 230 Volt
output : 25kV Pulse
PRR : Single Shot - 100Hz
Type No : Z/49/28 (Y-1453)

59. High Voltage Cathode Collector Probe Tray for RADARS 37KV DC/47KV DC

Trays having several measurement & protection devices , each used for a special purpose in the correct monitoring & maintenance of the HV section of the RADAR

Type No : Z/29/74 (TLR)



60. High Voltage High Frequency Inverter

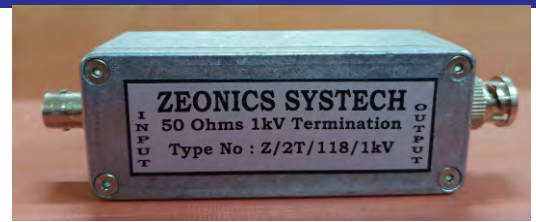


Input : 230 Volt 50Hz 1φ
Output Range : 1kV to 20kV or
1kV to 50kV
Frequency Range : 500Hz to 20kHz
Type No : Z/47/128

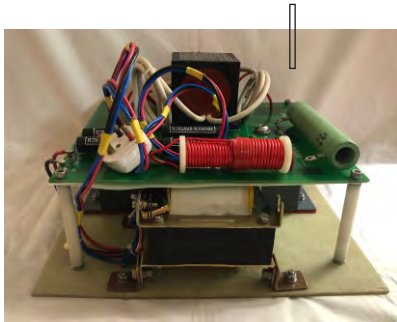
Others Items

61. High Voltage Termination

Zo : 50 ohm
Max Voltage : 2kV Pulse/1kV pulse
Terminal : N Type Female to
N Type Male or BNC
Type No : Z/25/118 (672)



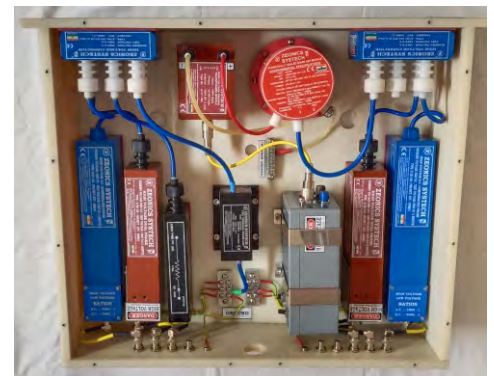
62. High Voltage Igniter For Boilers



Input : 230 Volts 50Hz 1 ϕ
Output : 2kV at 6 Joules Pulse
System : Low Inductance Max Energy
Transformer System
Application : Boiler Igniter
Type No : Z/44/118

63. Cathode + Collector Tray

Project : Missile System
Working Voltage : 47kV DC Max
Output : DC Divider/ AC Divider
Trigger Generator/ SBV Protection
Type No : Z/48/01, Z/48/136



64. 1A-5A EMI Filter



Max Continuous Operating Voltage : 100V DC
Current Ratings : 1A to 5A Versions
High Pot Test Voltage : 400V DC (1min)
Overload Capacity : 140% Rated Current for 10 min
Temperature Range : -20° C to +80° C
Type No : Z/47/164

65. High Frequency Cold Plasma System

Input : 230Volt 50Hz 1 ϕ
Output : 0 to 30kV AC 50Hz
Frequency : 100Hz to 5kHz/ 5kHz to 20kHz
Duty : Continuous
Control : 1) Frequency
2) Voltage
3) Pulse Width
Type No : Z/49/42



Others Items

66. Fixed 4μs Delay Line



Input : 9V Pulse
Output : 8V Pulse
Test Voltage : 50V
Delay : 4μs ±10%
Dimension : Length: 75mm
 Width: 12mm
Height : 10mm
Type No : Z/50/80

67. High Voltage Short Clearing System

Input : 230 Volt 50Hz
Output : 200 Volt to 20kV DC
Energy : 1500 Joules max
Pulse Duration : Microseconds
Peak Current : ≥ 25kA
Type No : Z/50/20



68. End Cap + Moulding Services for X-Ray Generator



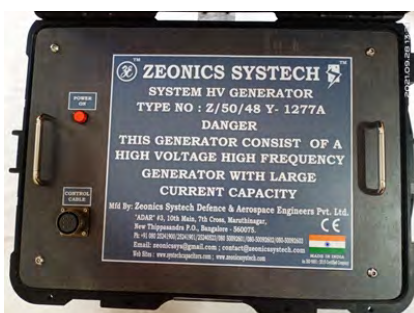
We provide lead free X-Ray Shields as well as Gun & Collector side moulding services for TWTs, RF Tubes, Klystron Joints & similar Environmental Protection
 X-Ray – Max 65 Kev

69. Under Water Shock Wave Generator for oil fields

Input : 230 Volts 50Hz 1 Phase
Output : High Energy 30kV Discharges
Over Pressure : ≈ 300 Mega Pascals Produced
Type No : Z/49/140
Dimension : L= 480mm x W=360mm x H=210mm x Weight=13.6kg
 : L=2370mm x Diameter=111mm x Weight=15.3kg (Probe)



70. High Voltage Pulse Current Injection



Input : 230 Volts
Output : 0 to 60kV DC Pulse
Max Current : At 60kV DC 1kA into a Load
Type : Z/50/48
Dimension : Power Supply: L=590mm
 W=435mm x H=255mm
Weight : 30.1kg
Control Box : L=480mm x W=360mm
 H=210mm x Weight=23kg

Others Items

71. High Voltage Ignitron Igniter

Input : 230Volts 50Hz 1 phase
Output : 3kV / Output Pulse
PRR : Max 1 pps
Revert : Nil
Dimension : 325mm x 160mm x 155mm
Type : Z/50/96
Weight : 4.35kg



72. High Voltage Resistor Box



Suitable for PCI Pulse
Working Voltage : 60kV Pulse
Max Current : 1kA
Taps Available : 0.2Ω/0.5Ω/50Ω/2Ω
Type No : Z/50/148
Dimension : L=400mm x W=250mm x H=165mm
Weight : 9.3kg

73. High Voltage Mechanical Plunger

Operating Voltage : 45kV DC at 5kA
Energizing Voltage : 24 Volts DC at 4.5A
Type No : Z/50/48
ON Duration : Max 10 Sec
Contacts : NO NC
Weight : 2kg
Dimension : L=245mm x W=110mm x H=70mm
Medium : Oil



Government Work is God's Work



In Case of Queries, Please Contact us at

ZEONICS SYSTECH

DEFENCE & AEROSPACE ENGINEERS (P) LTD.

**"ADAR" #3, 10th Main, 7th Cross, Maruthinagar, New Thippasandra P.O.,
Bangalore - 560075.**

**Ph: +91 080 25241900, 25241901, 25240523 +91 080-50092601,
080-50092602, 080-50092603, 8296086630**

Email : zeonicssys@gmail.com, contact@zeonicssystem.com

Website : www.zeonicssystem.com / www.systemcapacitors.com

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