DIOTEC ELECTRONICS CORP
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Data Sheet No. BPTD-1500D-1A

POWER OVER ETHERNET (PoE)
EQUIPMENT PROTECTION

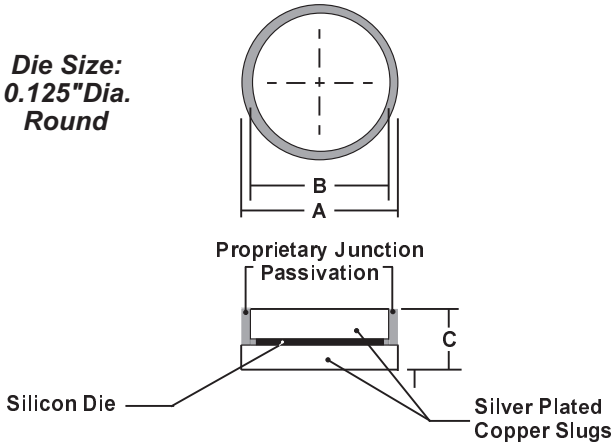
1.5 KP BIPOLAR TRANSIENT VOLTAGE SUPPRESSOR DIODE CELLS

FEATURES

- Lowest Electrical & Thermal Resistance - Ideally Suited For Preventing Overvoltage/Overcurrent Damage to Power over Ethernet (PoE) Equipment
- VOID FREE VACUUM DIE SOLDERING For Lowest Electrical/Thermal Resistance And Maximum Mechanical Strength & Heat Dissipation (Solder Voids: Typical ≤ 2%, Max. ≤ 10% of Die Area)
- Round Die For High Power Heavy Duty Performance
- High Heat Handling Capability With Very Low Thermal Stress
- Proprietary Junction Passivation For Superior Reliability And Performance
- **RoHS COMPLIANT**

MECHANICAL SPECIFICATION

Die Size: 0.125"Dia. Round



DIM	INCHES	
	NOM	+/-
A	0.142	0.0021
B	0.125	0.0025
C	0.052	0.003

MECHANICAL DATA

- Finish: All external surfaces are silver plated for corrosion resistance superior solderability
- Soldering Temperature: 282 °C maximum
- Mounting Position: Any
- Polarity: Bipolar

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	RATINGS	UNITS
Series Number		BP1.5-23	
Breakdown Voltage (Cells Begin to Conduct) (Note 1)	$V_{(BR)}$	23.3+/- 5%	VOLTS
Test Current (To Determine V_{BR})	I_T	1	mA
Clamping Voltage During a 10/1000μS Transient	$V_{C(10)}$	33 Max	VOLTS
Maximum Current Conducted During a 10/1000μSTransient	$I_{PPM(10)}$	45 Min	AMPS
Reverse Stand Off Voltage (Voltage at Which I_R Measured)	V_{WM}	20.5	VOLTS
Maximum Current Conducted at V_{WM}	I_R	1 Max	μA
Maximum Current Conducted During 8/20 μS Transient	$I_{PPM(8)}$	400 Min	AMPS
Clamping Voltage During 8/20 μS Transient	$V_{C(8)}$	43 Max	VOLTS

Notes: (1) Diode cell breakdown voltage can be tailored to meet your specific application requirements. Please Contact Us for details.