

## 6.0 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  $\leq 2\%$ , Max.  $\leq 10\%$  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

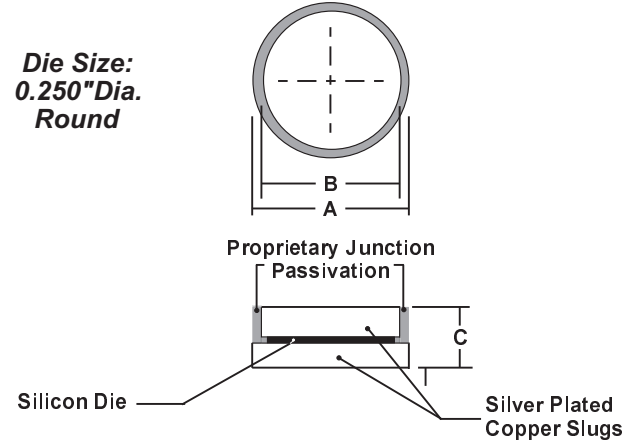
### RoHS COMPLIANT

### MECHANICAL DATA

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

### MECHANICAL SPECIFICATION

Die Size:  
 0.250" Dia.  
 Round



DIM	INCHES	
	NOM	+/-
A	0.285	0.003
B	0.258	0.003
C	0.098	0.004

### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	RATINGS	UNITS
Series Number		BP6.0-23	
Breakdown Voltage (Cells Begin to Conduct) (See Note 1)	VBR	23.30 +/- 5%	VOLTS
Test Current (To Determine VBR)	IT	5	mA
Clamping Voltage During a 10/1000 $\mu$ S Transient	V <sub>C(10)</sub>	32.4 Max	VOLTS
Maximum Current Conducted During a 10/1000 $\mu$ S Transient	I <sub>PPM(10)</sub>	154 Min	AMPS
Reverse Stand Off Voltage (Voltage at Which IR Measured)	VWM	20	VOLTS
Maximum Current Conducted at VWM	IR	1.25 Max	$\mu$ A
Maximum Current Conducted During 8/20 $\mu$ S Transient	I <sub>PPM(8)</sub>	1500 Min	AMPS
Clamping Voltage During 8/20 $\mu$ S Transient	V <sub>C(8)</sub>	38 Max	VOLTS

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