



**Solid State Devices, Inc.**

14701 Firestone Blvd \* La Mirada, Ca 90638  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773  
 ssdi@ssdi-power.com \* www.ssdi-power.com

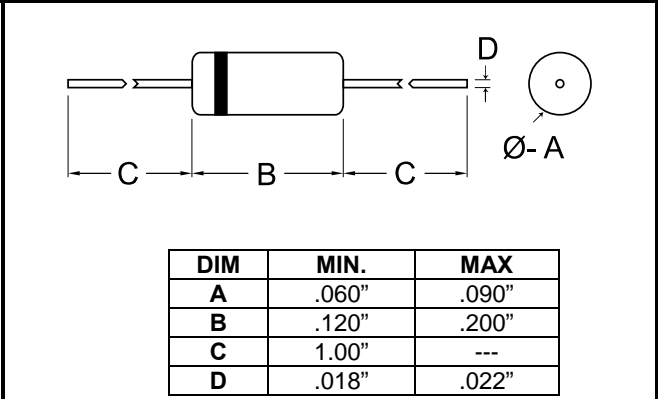
**SZ5A2.4  
 thru  
 SZ5A200**

**DESIGNER'S DATA SHEET**

- FEATURES:**
- Hermetically Sealed in Glass
  - Axial Lead Rated at 500 mW
  - Surface Mount Rated at 800 mW
  - Available in Axial (L), Round Tab Surface Mount (SM) and Square Tab Surface Mount (SMS) Versions
  - Available to TX, TXV, and Space Levels <sup>5/</sup>
  - Available in 10% and 5% Tolerances. For other Voltage Tolerances, Contact Factory.

**500mW and 800mW  
 2.4 – 200 VOLTS  
 ZENER DIODES**

Maximum Ratings	Symbol	Value	Units
Nominal Zener Voltage	V <sub>Z</sub>	2.4 - 200	V
Zener Current	<sup>L</sup> SM, SMS I <sub>ZM</sub>	2.2 - 198 3.3 - 297	mA
Continuous Power	<sup>L</sup> SM, SMS P <sub>D</sub>	500 800	mW
Operating and Storage Temp.	Top, Tstg	-65 to +175	°C
Thermal Resistance, Junction to Lead, L=3/8" (for L)	R <sub>θJL</sub>	250	°C/W
Junction to End Cap (for SM, SMS)	R <sub>θJE</sub>	150	
Junction to Ambient (for All)	R <sub>θJA</sub>	300	



**Part Number/Ordering Information <sup>2/</sup>**

**SZ5**

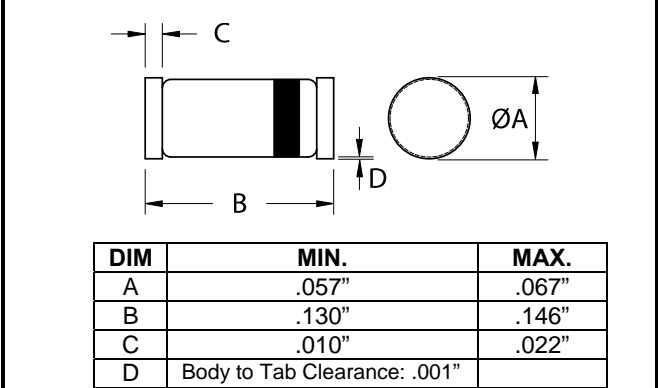
<sup>5/</sup> Screening   
 L = Not Screened  
 TX = TX Level  
 TXV = TXV  
 S = S Level

<sup>4/</sup> Package Type   
 L = Axial Leaded  
 SM = Surface Mount Round Tab  
 SMS = Surface Mount Square Tab

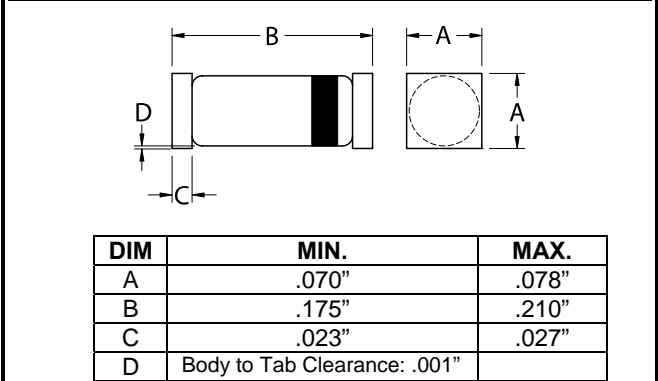
**Voltage/Family**  
 2.4 thru 200 = 2.4V thru 200V, See Table on Page 2

**Voltage Tolerance**  
 A = 10% Voltage Tolerance  
 B = 5% Voltage Tolerance

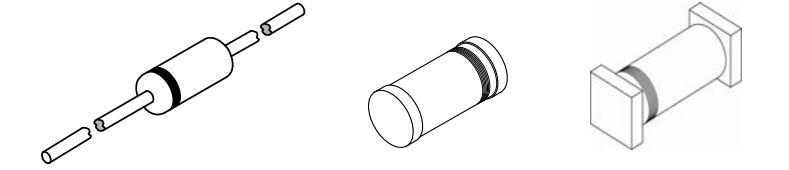
**AXIAL (L)** All dimensions are prior to soldering



**ROUND TAB (SM)** All dimensions are prior to soldering



**SQUARE TAB (SMS)** All dimensions are prior to soldering



**NOTE:** All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

**DATA SHEET #: Z00002B**

**DOC**



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Table with columns: PART NUMBER, Nominal Zener Voltage, Zener Test Current, Maximum Zener Impedance, Maximum Reverse Leakage Current (IR @ VR, VR-10%, VR-5%), Typical Temperature Coefficient, Max. Continuous Current (Axial, Surface Mount), Voltage Tolerance (10%, 5%), and current/voltage values for various part numbers.

NOTES: 1/ All zener voltages are measured with an automated test set using a 35 msec test time. Longer or shorter test time will have a corresponding effect on the measured value due to heating effects. 2/ For Ordering Information, Price, Operating Curves, and Availability- Contact Factory. 3/ Zener impedance is derived from the AC voltage divided by the AC current with RMS value of 10% of DC zener test current superimposed on the test current. 4/ SSDI standard marking consists of a contrasting color cathode dot or band. Part number information is included on packaging labels. 5/ Screened to MIL-PRF-19500. 6/ Suffix "L" for Axial, "SM" for Round Tab Surface Mount, and "SMS" for Square Tab Surface Mount. Data Sheet Z00002B