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Data Sheet N1412, Rev. B

SD560B STANDARD RECTIFIER

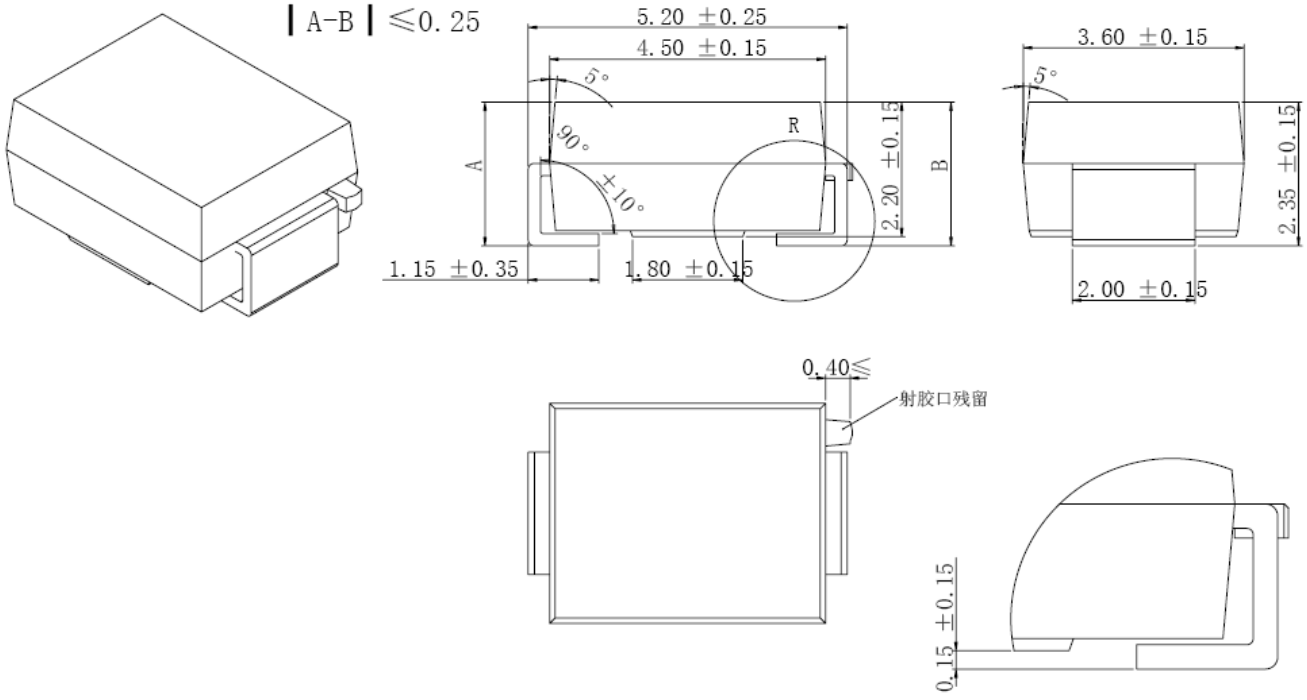
Features:

- **Glass Passivated Die Construction**
- **Ideally Suited for Automatic Assembly**
- **Low Forward Voltage Drop**
- **Surge Overload Rating to 200A Peak**
- **Low Power Loss**
- **Built Strain Relief**
- **Plastic Case Material has UL Flammability Classification Rating 94V-O**
- **This is a Pb − Free Device**
- **All SMC parts are traceable to the wafer lot**
- **Additional testing can be offered upon request**

Mechanical data:

- **Case: Molded Plastic**
- **Terminals: Solder Plated , Solderable Per MIL-STD 750 ,Method 2026**
- **Polarity: Cathode Band or Cathode Notch**
- **Marking: Type Number**
- **Weight: 0.68 grams(Approx)**

Mechanical Dimensions: In mm



SMB

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Marking Diagram:



Where XXXXX is YYWWL

SD560B = Part Name
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information

Device	Package	Shipping
SD560B	SMB (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SD560B	Unit
Maximum Peak Repetitive Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_R	600	V
Maximum RMS Voltage	V_{RMS}	420	
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length @T_A = 75°C	$I_{(AV)}$	5.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200	A
I^2t Rating for fusing (t < 8.3ms)	I^2t	166	A^2S
Maximum Instantaneous Forward Voltage @I_F = 5.0A	V_F	1.2	V
Maximum DC Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_R	9.0 170	uA
Typical Junction Capacitance (Note 1)	Cj	50	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20	°C/W
Operating Storage Temperature Range	T_{STG}	-65 to +175	°C
Operating Junction Temperature	T_J	-65 to +175	°C
Case Style	SMB		

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal resistance form junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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FIG. 1- FORWARD CURRENT DERATING CURVE

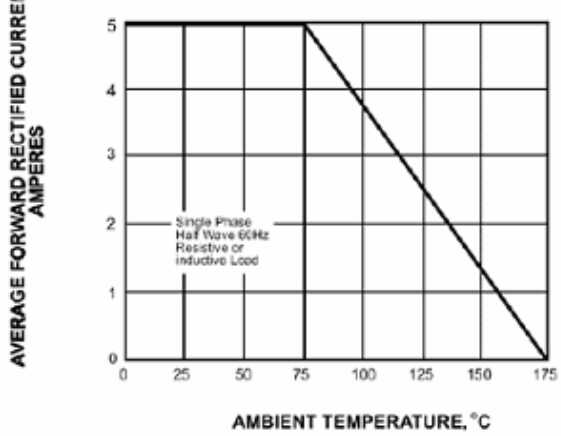


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

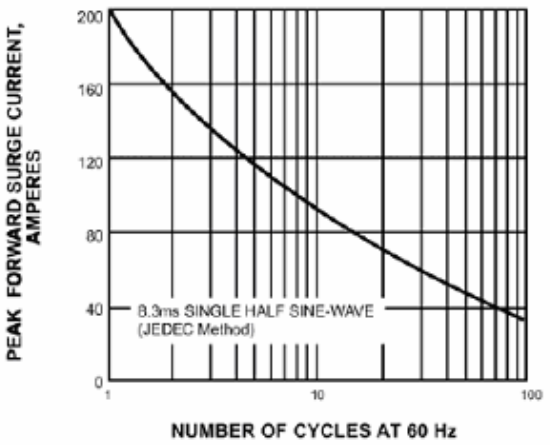


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

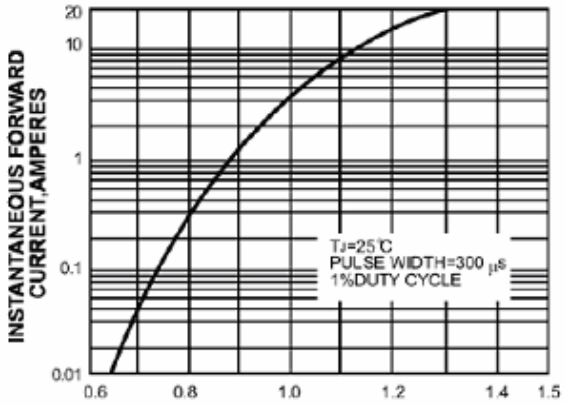


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

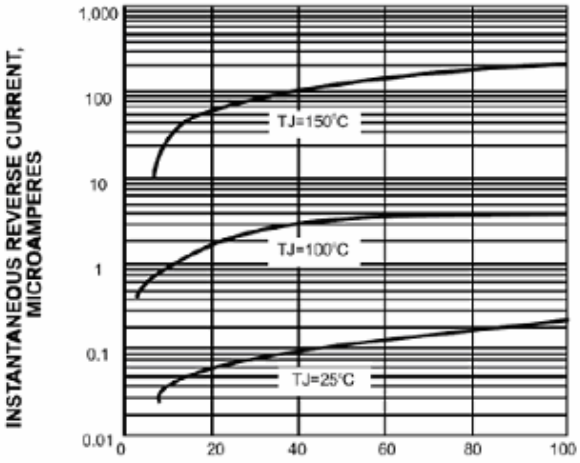


FIG. 5-TYPICAL JUNCTION CAPACITANCE

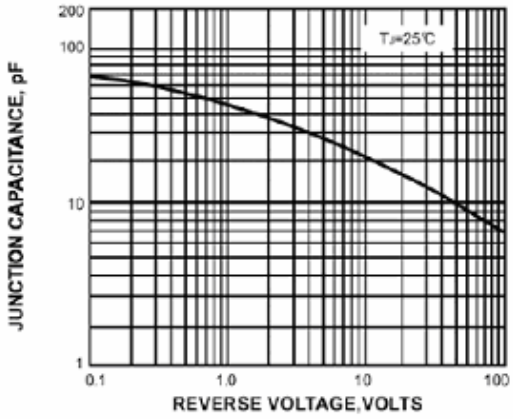
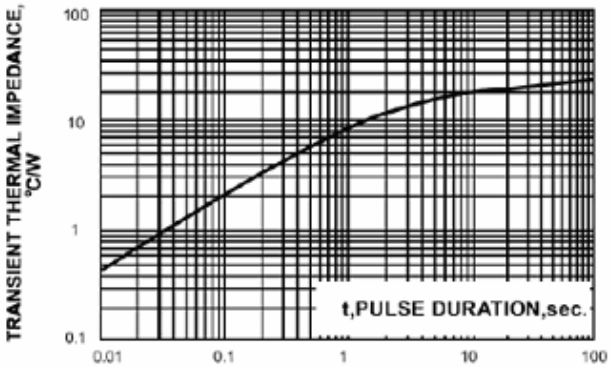


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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