

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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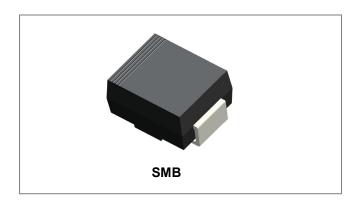






# RoHS HF

## SD560B STANDARD RECTIFIER



#### **Features**

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

## **Circuit Diagram**



### **Mechanical Data**

- · Case: SMB molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: AnyWeight: 0.09 grams

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

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	SD560B	Units
Maximum Peak Repetitive Reverse Voltage Maximum DC Blocking Voltage	V <sub>RRM</sub> V <sub>DC</sub>	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	420	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length @T <sub>A</sub> = 75°C	I <sub>(AV)</sub>	5.0	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	200	А
I <sup>2</sup> t Rating for fusing (t < 8.3ms)	I² t	166	A <sup>2</sup> S
Maximum Instantaneous Forward Voltage @I <sub>F</sub> = 5.0A	V <sub>F</sub>	1.2	V
Maximum DC Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	IR	9.0 170	uA
Typical Junction Capacitance (Note 1)	Cj	50	pF
Typical Thermal Resistance (Note 2)	R <sub>0</sub> JA	20	°C/W
Operating Storage Temperature Range	T <sub>STG</sub>	-65 to +175	°C
Operating Junction Temperature	TJ	-65 to +175	°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

- 2. Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length, P.C.B. mounted.
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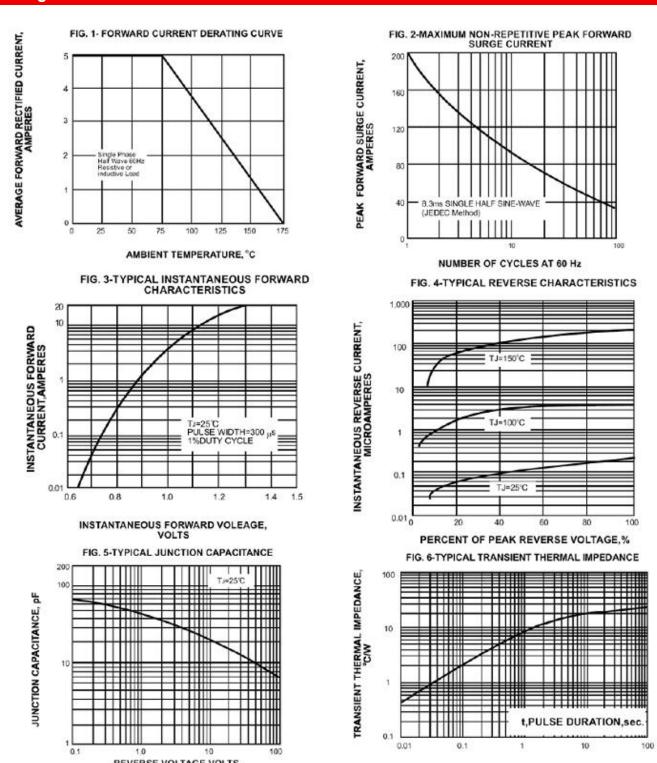




## **Ratings and Characteristics Curves**

1.0

REVERSE VOLTAGE, VOLTS

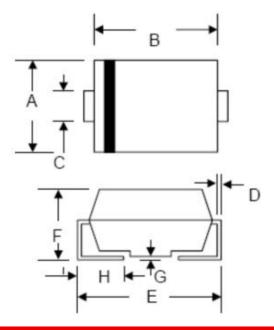


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## **Mechanical Dimensions SMB**



SYMBOL	Millimeters		Inches	
STIMBOL	Min.	Max.	Min.	Max.
А	3.30	3.94	0.130	0.155
В	4.06	4.70	0.160	0.185
С	1.80	2.20	0.071	0.087
D	0.152	0.305	0.006	0.012
Е	4.80	5.59	0.189	0.220
F	2.10	2.60	0.083	0.102
G	0.051	0.203	0.002	0.008
Н	0.76	1.52	0.030	0.060

## **Ordering Information**

Device	Package	Shipping
SD560B	SMB	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

# **Marking Diagram**



Where XXXXX is YYWWL

 SD560B
 = Part Name

 YY
 = Year

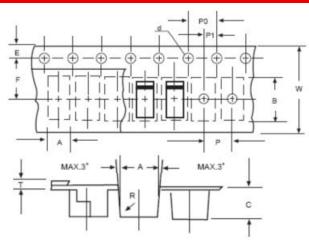
 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

## **Carrier Tape Specification SMB**



SYMBOL	Millimeters		
STWIBUL	Min.	Max.	
Α	3.99	4.19	
В	5.72	5.92	
С	3.23	3.43	
d	1.40	1.60	
E	1.40	1.60	
F	5.60	5.70	
Р	7.90	8.10	
P0	3.90	4.10	
P1	1.90	2.10	
Т	-	0.60	
W	11.80	12.20	

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