

SD560C STANDARD RECTIFIER



Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated , Solderable Per MIL-STD 750 ,Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.21 grams

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

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

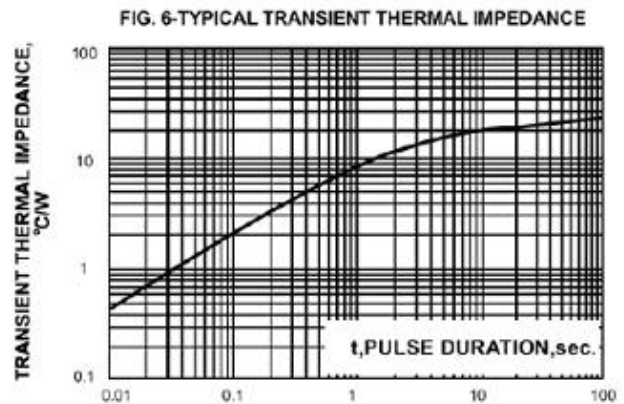
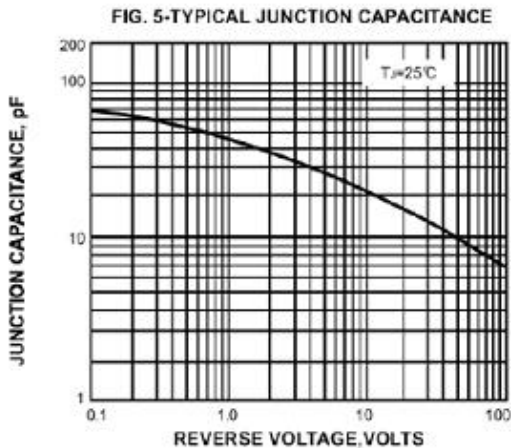
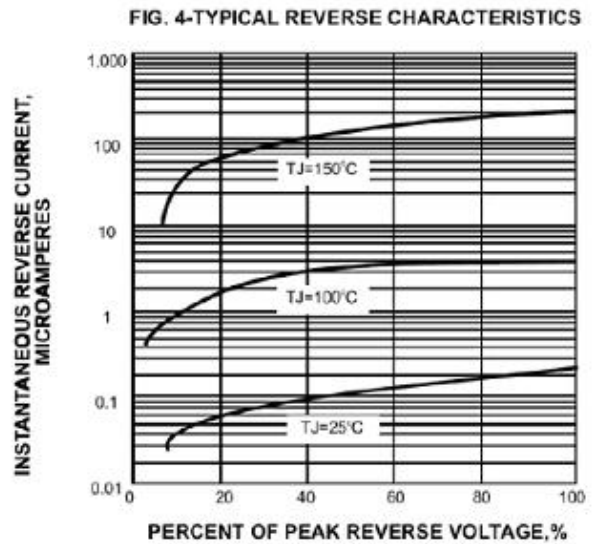
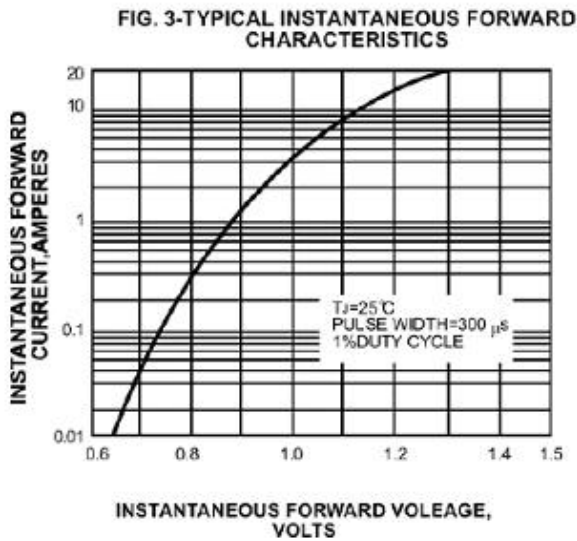
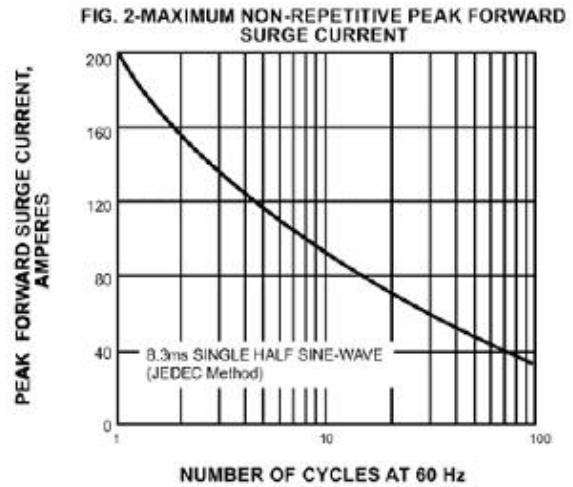
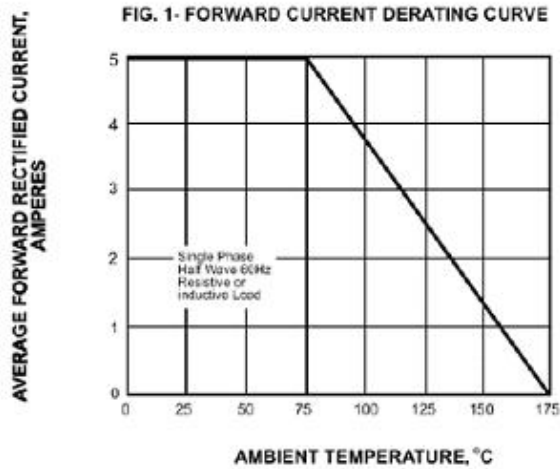
Characteristic	Symbol	SD560C	Units
Maximum Peak Repetitive Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_R	600	V
Maximum RMS Voltage	V_{RMS}	420	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length @ $T_A = 75^{\circ}\text{C}$	$I(AV)$	5.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200	A
Maximum Instantaneous Forward Voltage @ $I_F = 5.0\text{A}$	V_F	1.2	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	9.0 170	uA
Typical Junction Capacitance (Note 1)	C_j	50	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20	$^{\circ}\text{C/W}$
Operating Storage Temperature Range	T_{STG}	-65 to +175	$^{\circ}\text{C}$
Operating Junction Temperature	T_J	-65 to +175	$^{\circ}\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

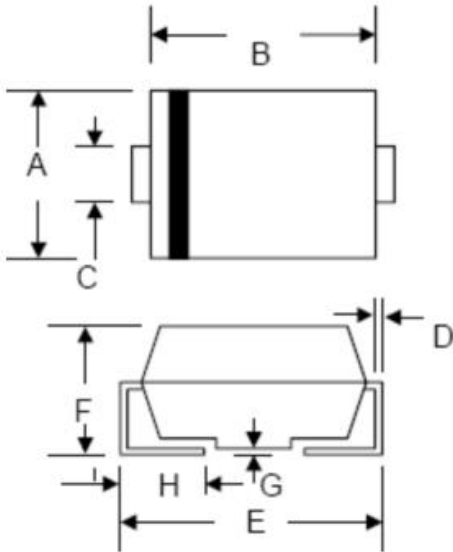
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Ratings and Characteristics Curves



Mechanical Dimensions SMC



SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.59	6.22	0.220	0.245
B	6.60	7.11	0.260	0.280
C	2.90	3.20	0.114	0.126
D	0.152	0.305	0.006	0.012
E	7.75	8.25	0.305	0.325
F	2.00	2.95	0.079	0.116
G	-	0.203	-	0.008
H	0.76	1.52	0.030	0.060

Ordering Information

Device	Package	Shipping
SD560C	SMC (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.

Marking Diagram

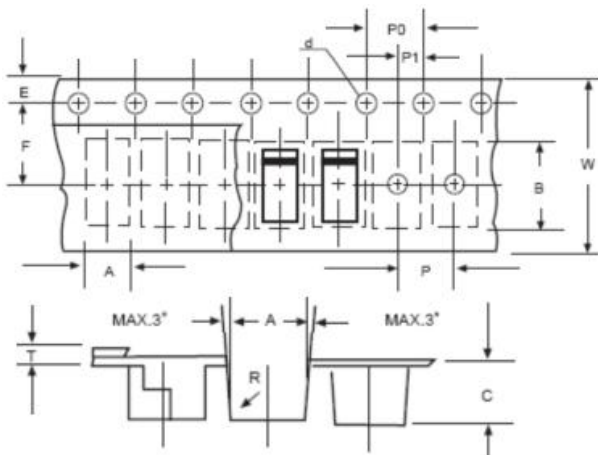


Where XXXXX is YYWWL

SD560C = Part Name
YY = Year
WW = Week
L = Lot Number

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

Carrier Tape Specification SMC



SYMBOL	Millimeters	
	Min.	Max.
A	5.90	6.10
B	8.20	8.40
C	2.40	2.60
d	1.40	1.60
E	1.40	1.60
F	7.60	7.70
P	7.90	8.10
P0	3.90	4.10
P1	3.90	4.10
T	-	0.600
W	15.80	16.20

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