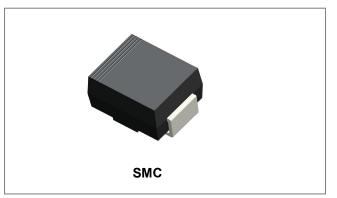


SD560C

Technical Data Data Sheet N1965, Rev.A





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

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°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 $@T_A = 75^{\circ}C$	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 = 5.0A	VF	1.2	V
Maximum DC Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 100^{\circ}C$	I _R	9.0 170	uA
Typical Junction Capacitance (Note 1)	Cj	50	pF
Typical Thermal Resistance (Note 2)	R _{0JA}	20	°C/W
Operating Storage Temperature Range	T _{STG}	-65 to +175	°C
Operating Junction Temperature	TJ	-65 to +175	°C

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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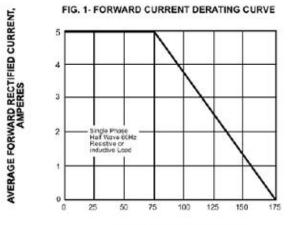
Circuit Diagram





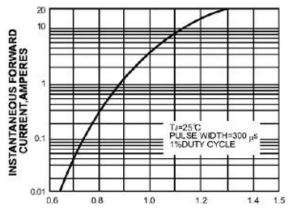
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Ratings and Characteristics Curves



AMBIENT TEMPERATURE, °C

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS







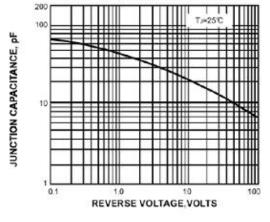
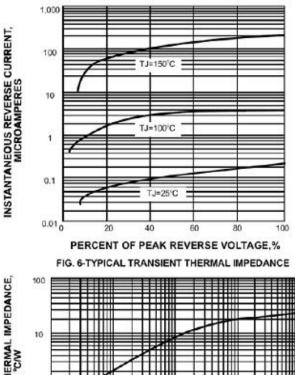
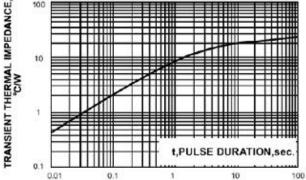


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT 200 PEAK FORWARD SURGE CURRENT, AMPERES 160 120 80 40 8.3ms SINGLE HALF SINE-WAVE (JEDEC Method) 10 100

NUMBER OF CYCLES AT 60 Hz

FIG. 4-TYPICAL REVERSE CHARACTERISTICS





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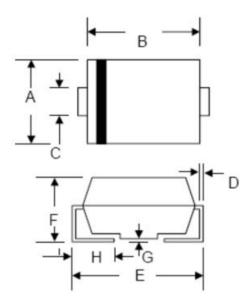
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Mechanical Dimensions SMC



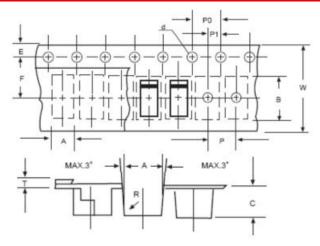
SYMBOL		neters	Inches	
STINIBUL	Min.	Max.	Min.	Max.
А	5.59	6.22	0.220	0.245
В	6.60	7.11	0.260	0.280
С	2.90	3.20	0.114	0.126
D	0.152	0.305	0.006	0.012
E	7.75	8.25	0.305	0.325
F	2.00	2.95	0.079	0.116
G	-	0.203	-	0.008
н	0.76	1.52	0.030	0.060

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.

Carrier Tape Specification SMC



Marking Diagram



Where XXXXX is YYWWL

SD560C = Part Name = Year ww = Week = Lot Number

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

SYMBOL	Millimeters		
STIVIBUL	Min.	Max.	
A	5.90	6.10	
В	8.20	8.40	
С	2.40	2.60	
d	1.40	1.60	
E	1.40	1.60	
F	7.60	7.70	
Р	7.90	8.10	
P0	3.90	4.10	
P1	3.90	4.10	
Т	-	0.600	
W	15.80	16.20	

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