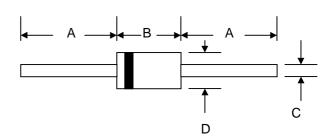


SB520 - SB560

5.0A SCHOTTKY BARRIER RECTIFIER

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



Mechanical Data

Case: Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 1.2 grams (approx.)

Mounting Position: Any

Marking: Type Number

DO-201AD					
Dim	Min	Max			
Α	25.4	_			
В	8.50	9.50			
С	1.20	1.30			
D	5.0	5.60			
All Dimensions in mm					

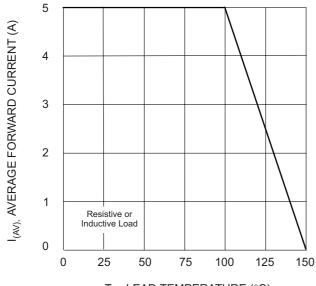
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

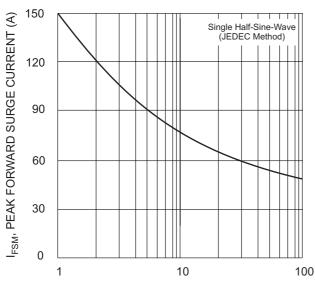
Characteristic	Symbol	SB520	SB530	SB540	SB550	SB560	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	٧
Average Rectified Output Current (Note 1) @T _L = 100°C	lo	5.0				Α	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150			А		
Forward Voltage @I _F = 5.0A	VFM	0.55 0.70		70	٧		
	lгм	0.5 50			mA		
Typical Junction Capacitance (Note 2)	Cj		550		40	00	pF
Typical Thermal Resistance Junction to Ambient	R_{θ} JA	10			K/W		
Operating and Storage Temperature Range	Тј, Тѕтс	-65 to +150			°C		

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

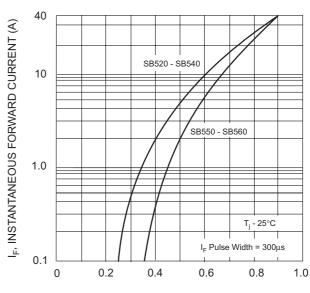
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C. $\,$



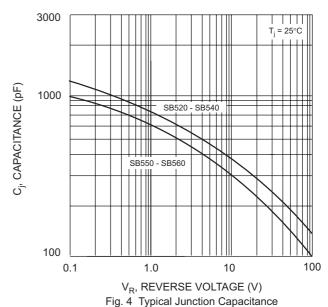
 T_L , LEAD TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



NUMBER OF CYCLES AT 60Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



 $\rm V_F$, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



100 T_j = 125°C T_j = 125°C T_j = 75°C T_j = 75°C T_j = 75°C T_j = 25°C T_j = 25°C

PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics

ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity		
SB520-T3	DO-201AD	1200/Tape & Reel		
SB520-TB	DO-201AD	1200/Tape & Box		
SB520	DO-201AD	500 Units/Box		
SB530-T3	DO-201AD	1200/Tape & Reel		
SB530-TB	DO-201AD	1200/Tape & Box		
SB530	DO-201AD	500 Units/Box		
SB540-T3	DO-201AD	1200/Tape & Reel		
SB540-TB	DO-201AD	1200/Tape & Box		
SB540	DO-201AD	500 Units/Box		
SB550-T3	DO-201AD	1200/Tape & Reel		
SB550-TB	DO-201AD	1200/Tape & Box		
SB550	DO-201AD	500 Units/Box		
SB560-T3	DO-201AD	1200/Tape & Reel		
SB560-TB	DO-201AD	1200/Tape & Box		
SB560	DO-201AD	500 Units/Box		

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Products listed in **bold** are WTE **Preferred** devices.

T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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