

Schottky Barrier Rectifier

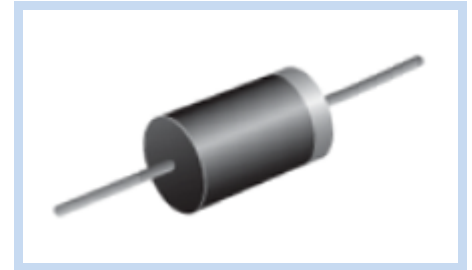
5A, 20~200V DO-201AD

SB520 to SB5200

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FEATURE

- Operating Temperature: -55 ~ 150°C
- High Current and Surge Capability
- Low Forward Voltage Drop
- Flame Resistance UL-94V-O
- Applications: High Frequency Inverters, Free Wheeling, and Protection



ELECTRICAL CHARACTERISTICS

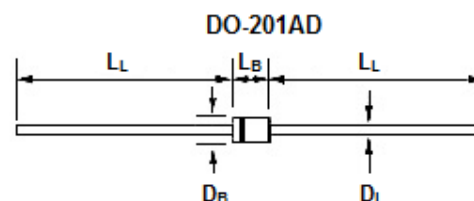
Parameter	Symbol	SB 520	SB 530	SB 540	SB 550	SB 560	SB 580	SB 5100	SB 5150	SB 5200
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20V	30V	40V	50V	60V	80V	100V	150V	200V
Maximum RMS Voltage	V_{RMS}	14V	21V	28V	35V	42V	56V	70V	105V	140V
Maximum DC Blocking Voltage	V_{DC}	20V	30V	40V	50V	60V	80V	100V	150V	200V
Maximum Average Forward Rectified Current	I_{AV}	5.0A								
Peak Forward Surge Current (JEDEC method)	I_{FSM}	100.0A								
Maximum Forward Voltage at 5.0A and 25°C	V_F	0.55V			0.70V		0.85V		0.95V	
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	0.5mA, at $T_A = 25^\circ\text{C}$								
		50mA, at $T_A = 100^\circ\text{C}$								
Typical Junction Capacitance ^{Note 1}	C_J	380pF								
Typical Thermal Resistance ^{Note 2}	$R_{\theta JA}$	25.0°C/W								
Operating Junction Temperature	T_J	-55 ~ 125°C				-55 ~ 150°C				
Storage Temperature	T_{stg}	-55 ~ 125°C				-55 ~ 150°C				

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance Junction to Ambient and from junction to lead at 9.5mm lead length P.C.B. Mounted.
3. $T_A = 25^\circ\text{C}$ unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load, for capacitive load, derate current by 20%.

DIMENSIONS

Item	Min (mm)	Max (mm)
L_B	8.5	9.5
L_L	25.4	-
D_B	5.0	5.6
D_L	1.2	1.3



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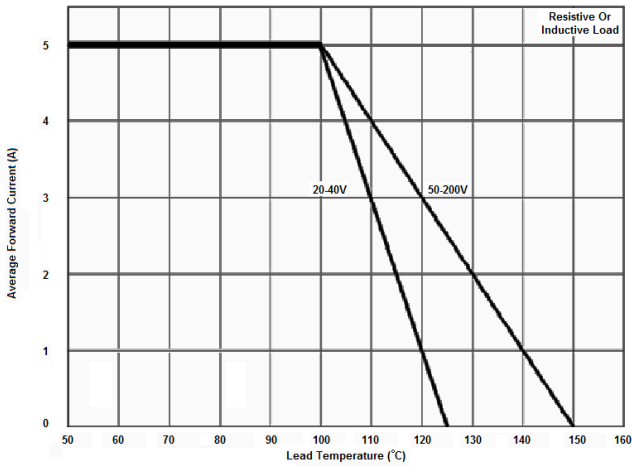
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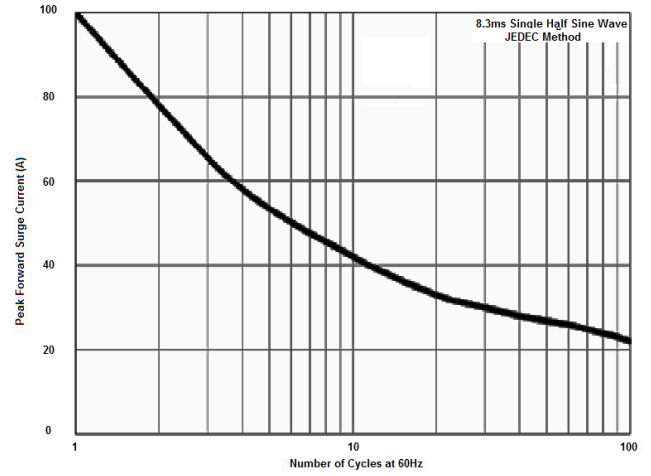
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CHARACTERISTIC CURVES

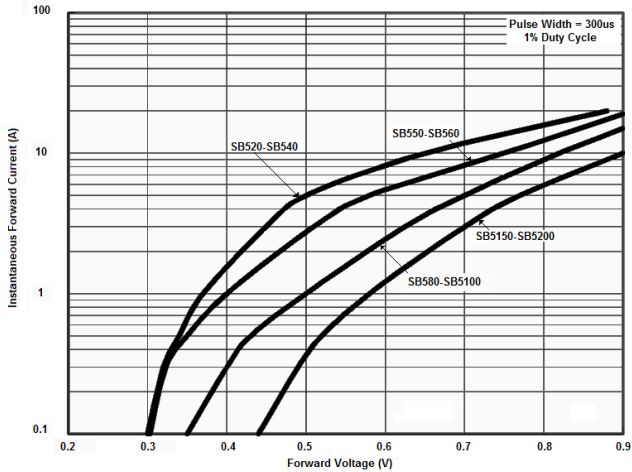
Forward Current Derating Curve



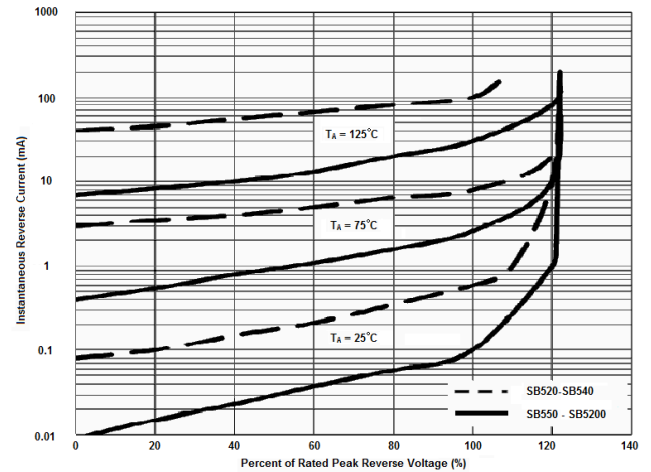
Maximum Non-Repetitive Forward Surge Current



Typical Forward Characteristics



Typical Reverse Characteristics



Meritek Discrete Components Series: <http://www.meritekusa.com/EN/productlist/node/22>

Meritek Product Series: <http://www.meritekusa.com/EN/products>

*Specifications subject to change without notice.