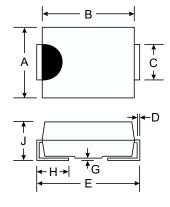


## 5.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

## **Features**

- Guard Ring Die Construction for Transient Protection
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 175A Peak
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application
- Plastic Material UL Flammability Classification 94V-0



SMC							
Dim	Min	Max					
Α	5.59	6.22					
В	6.60	7.11					
С	2.75	3.18					
D	0.15	0.31					
E	7.75	8.13					
G	0.10	0.20					
Н	0.76	1.52					
J	2.00	2.62					
All Dimensions in mm							

## **Mechanical Data**

Case: Molded Plastic

 Terminals: Solder Plated Terminal Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band or Cathode Notch

Approx. Weight: 0.21gramsMarking: Type Number

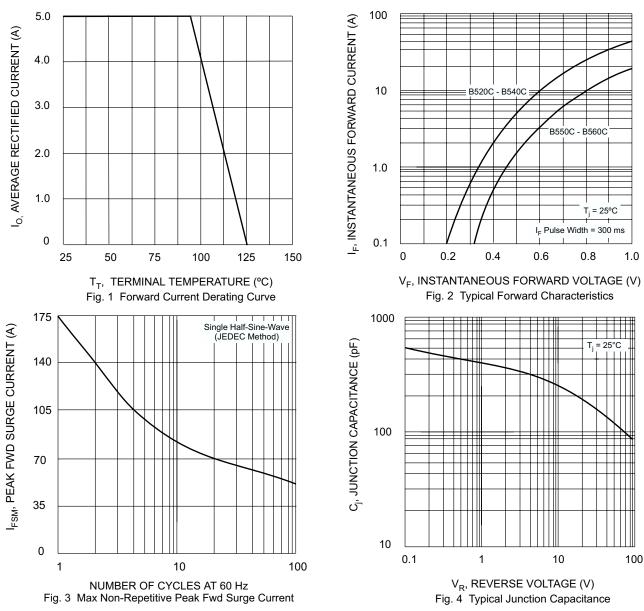
## Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

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

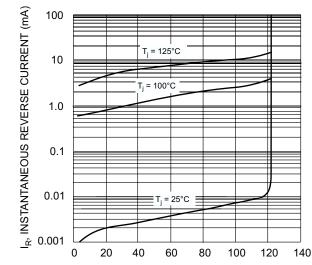
Characteristic		Symbol	B520C	B530C	B540C	B550C	B560C	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	20	30	40	50	60	V
RMS Reverse Voltage		V <sub>R(RMS)</sub>	14	21	28	35	42	V
Average Rectified Output Current @ T <sub>T</sub> = 90°C		Ιο	5.0					Α
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave Superimposed on Rated Load (JEDEC method)		I <sub>FSM</sub>	175					А
Forward Voltage	@ $I_F = 5.0A DC$	$V_{FM}$	0.55 0.70		70	V		
Peak Reverse Current @T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 100°C		I <sub>RM</sub>	0.5 20					mA
Typical Junction Capacitance (Note 2)		Cj	300					pF
Typical Thermal Resistance, Junction to Terminal (Note 1)		R <sub>θ</sub> JT	10					K/W
Typical Thermal Resistance, Junction to Ambient		R <sub>θJA</sub>	50					°C/W
Operating Temperature Range		Tj	-55 to +125					°C
Storage Temperature Range		T <sub>STG</sub>	-55 to +150					°C

Notes: 1. Thermal Resistance: Junction to terminal, unit mounted on PC board with 5.0 mm (0.013 mm thick) copper pads as heat sink.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.







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