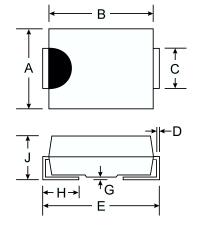


3.0A HIGH VOLTAGE SCHOTTKY BARRIER RECTIFIER

Features

- Guard Ring Die Construction for Transient Protection
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 100A Peak
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application
- Plastic Material: UL Flammability Classification Rating 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: SMC, Molded Plastic

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

Polarity: Cathode Band or Cathode Notch

Weight: 0.21 grams (approx.)

Marking: B370, B380, B390: Type number

B3100: B310

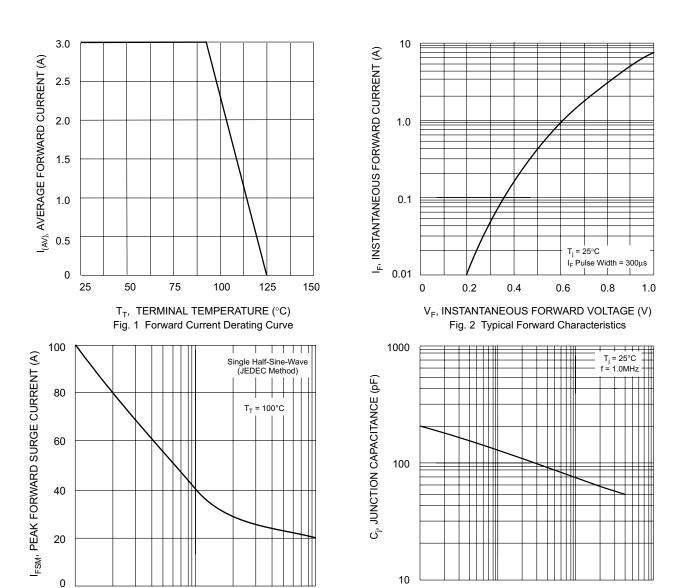
Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

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

Characteristic		Symbol	B370	B380	B390	B3100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		V _{RRM} V _{RWM} V _R	70	80	90	100	٧
RMS Reverse Voltage		V _{R(RMS)}	49	56	63	70	V
Average Rectified Output Current @ T _T = 90°C		lo	3.0				
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	100				Α
Forward Voltage @ I _F = 3.0A	@ T _A = 25°C @ T _A = 100°C	V _{FM}	0.79 0.69			V	
Peak Reverse Current at Rated DC Blocking Voltage	@ T _A = 25°C @ T _A = 100°C	I _{RM}	0.5 20				mA
Typical Junction Capacitance (Note 2)		Cj	100				pF
Typical Thermal Resistance Junction to Terminal (Note 1)		R⊕JT	10				°C/W
Operating Temperature Range		Tj	-55 to +125				°C
Storage Temperature Range		T _{STG}	-55 to +150				°C

Notes

- 1. Valid provided that terminals are kept at ambient temperature.
- 2. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.



100

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

 V_R , REVERSE VOLTAGE (V) Fig. 4 Typical Junction Capacitance

1

10

100

0.1