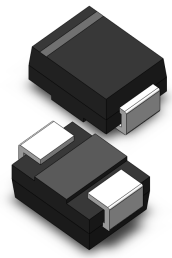
B3150B - B3200B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE: 150-200V
CURRENT: 3.0 A



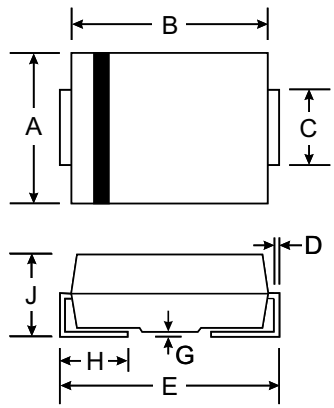
Features

- 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: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)

RoHS COMPLIANT



SMB(DO-214AA)		
Dim	**Min**	**Max**
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
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	B3150B	B3200B	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	150	200	V
Maximum RMS voltage	V_{RMS}	105	140	V
Maximum DC blocking voltage	V_{DC}	150	200	V
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_{(AV)}$	3.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80.0		A
Maximum instantaneous forward voltage at 3.0A	V_F	0.95		V
Maximum DC reverse current T_A=25℃	I_R	0.2		mA
at rated DC blocking voltage T_A=100℃		2.0		
Typical junction capacitance (NOTE 1)	C_J	160		pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	40.0		°C/W
Operating junction temperature range	$T_{J,}$	-65 to +150		°C
Storage temperature range	T_{STG}	-65 to +150		°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES B3150B THRU B3200B

FIG. 1- FORWARD CURRENT DERATING CURVE

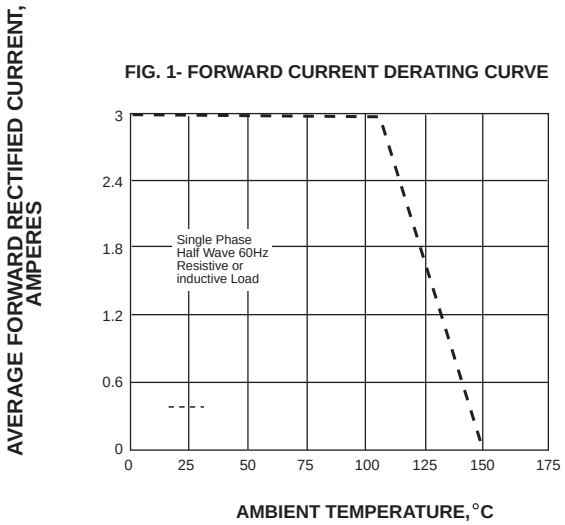


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

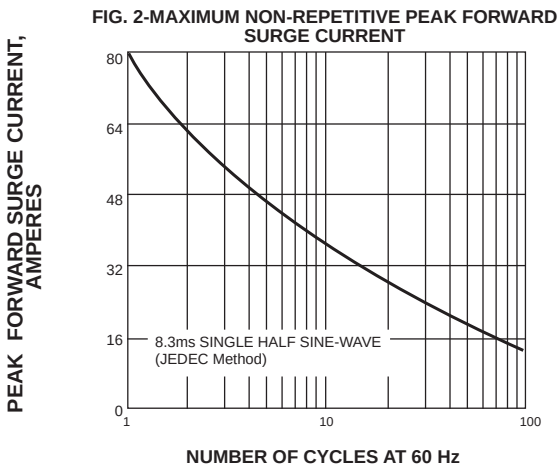


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

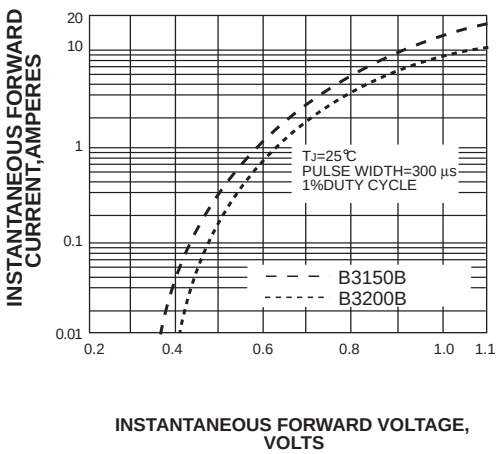


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

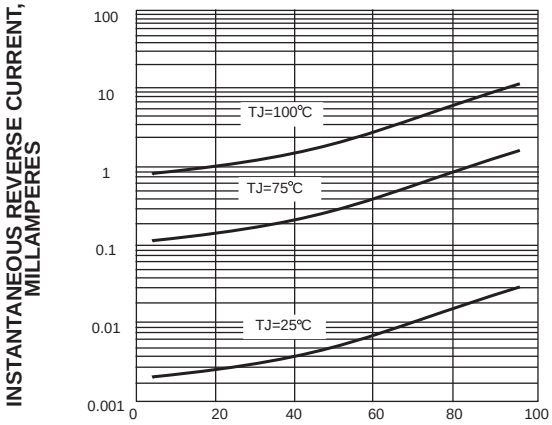


FIG. 5-TYPICAL JUNCTION CAPACITANCE

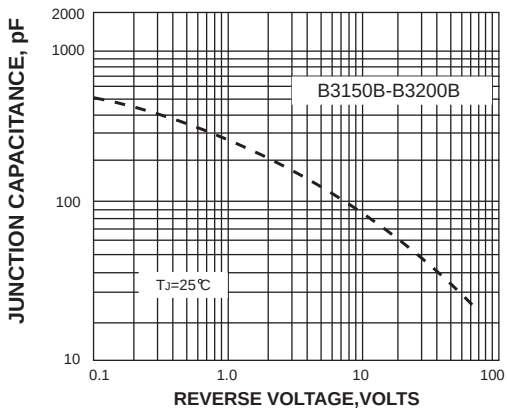


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

