

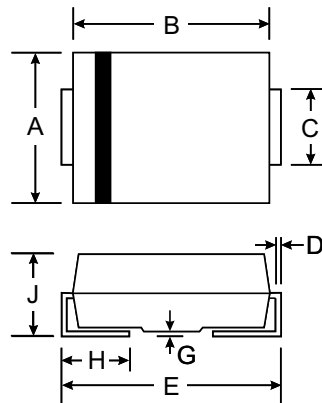
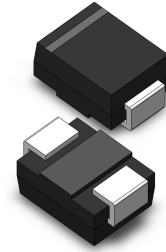
VOLTAGE RANGE: 150-200V
CURRENT: 3.0 A

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.)



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 <small>T_A=25°C</small> at rated DC blocking voltage <small>T_A=100°C</small>	I _R	0.2	2.0	mA
Typical junction capacitance (NOTE 1)	C _J	160		pF
Typical thermal resistance (NOTE 2)	R _{θJA}	40.0		°C/W
Operating junction temperature range	T _J	-65 to +150		°C
Storage temperature range	T _{STG}	-65 to +150		°C

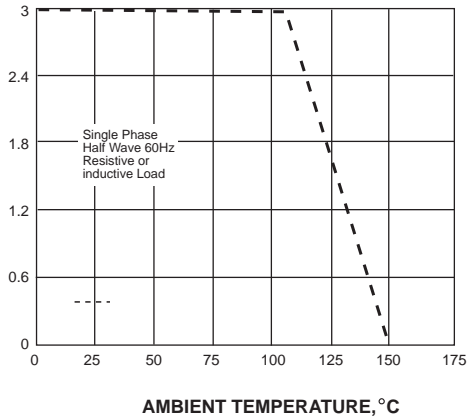
Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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

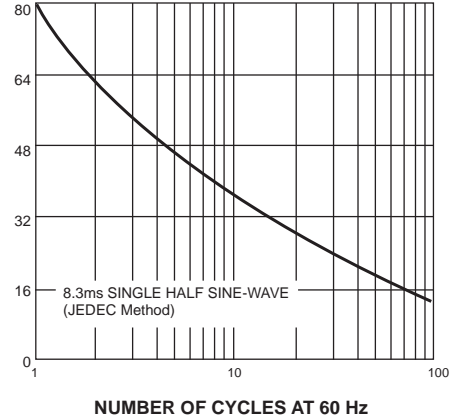
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



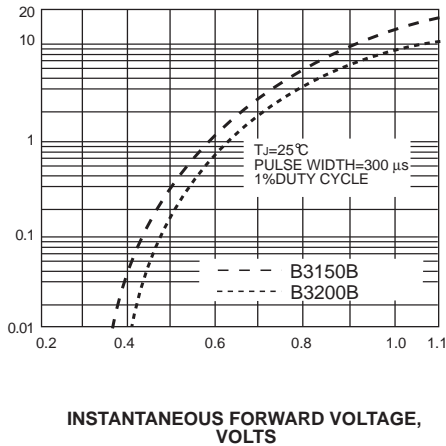
PEAK FORWARD SURGE CURRENT, AMPERES

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



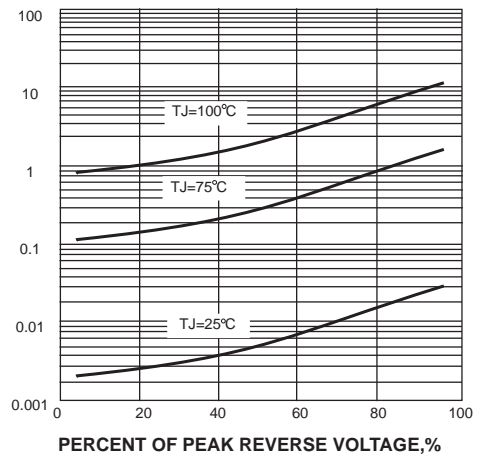
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



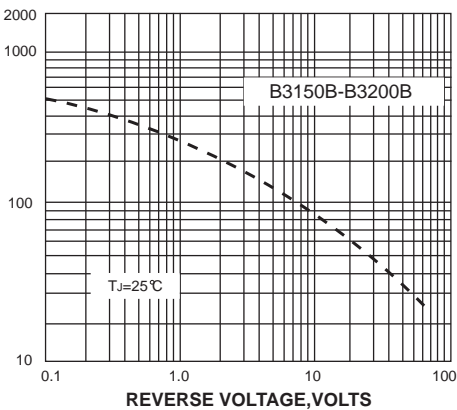
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

