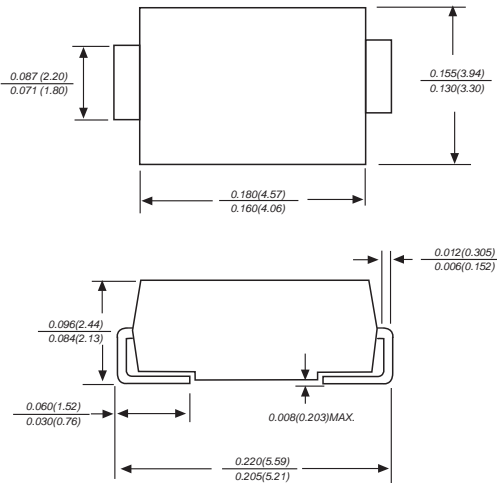




# B320B THRU B3A0B

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**  
 Reverse Voltage - 20 to 100 Volts Forward Current - 3.0 Amperes

## DO-214AA/SMB



Dimensions in inches and (millimeters)

## FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

## MECHANICAL DATA

**Case:** JEDEC DO-214AA molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.003 ounce, 0.093 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

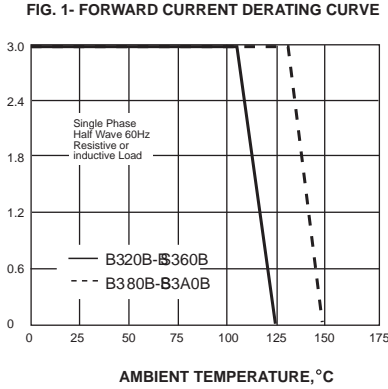
Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	B320B	B330B	B340B	B350B	B360B	B380B	B3A0B	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	VOLTS
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	VOLTS
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	VOLTS
Maximum average forward rectified current at $T_L$ (see fig.1)	$I_{(AV)}$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100.0							Amps
Maximum instantaneous forward voltage at 3.0A	$V_F$	0.55		0.70		0.85		Volts	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	0.5							mA
		20				10			
Typical junction capacitance (NOTE 1)	$C_J$	500			300			pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55.0							°C/W
Operating junction temperature range	$T_J$	-50 to +125					-50 to +150		°C
Storage temperature range	$T_{STG}$	-50 to +150							°C

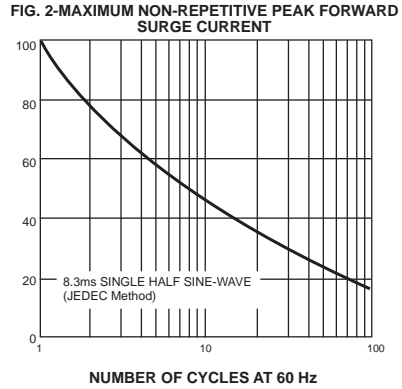
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES B320B THRU B3A0B

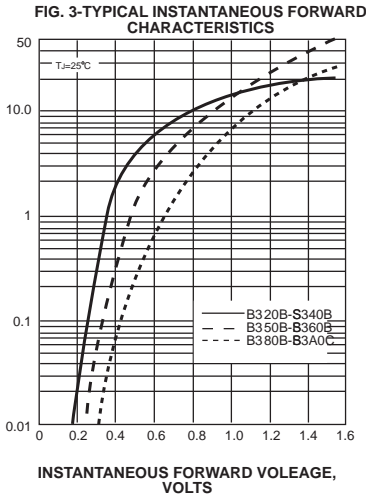
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



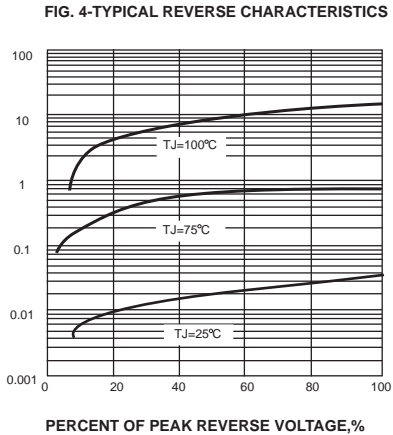
PEAK FORWARD SURGE CURRENT, AMPERES



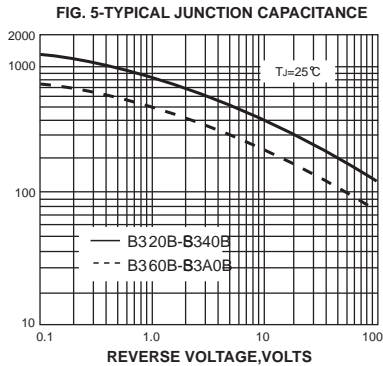
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

