



SCHOTTKY BARRIER RECTIFIER

SB320 THRU SB3100

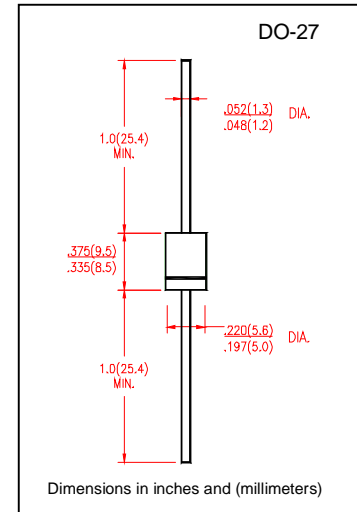
VOLTAGE RANGE 20 to 100 Volts  
CURRENT 3.0 Ampere

FEATURES

- Fast switching
- Low forward voltage
- Low power loss for high efficiency
- High surge capability
- High temperature soldering guaranteed  
250°C/10 seconds, 0.375”(9.5mm)lead length

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: solderable per MIL-STD-202E method 208C
- Polarity: Color band denoted cathode end
- Mounting position: Any
- Weight: 0.042 ounce, 1.19 gram



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 derate current by 20%

	SYMBOLS	SB320	SB330	SB340	SB350	SB360	SB380	SB3100	UNIT
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 0.375" (9.5mm) lead length ,(Note 1) $T_L=100^{\circ}C$	$I_{(AV)}$	3.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	80							Amps
Maximum Instantaneous Forward Voltage @ 3.0A	$V_F$	0.55		0.75		0.85		Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage per element (Note 1)	$T_A = 25^{\circ}C$	0.5							mA
	$T_A = 125^{\circ}C$	30							
Typical Junction Capacitance(measured at 1.0Hzand applied reverse voltage of 4.0V)	$C_J$	250							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	15							$^{\circ}C/W$
Operating Junction Temperature Range	$T_J$	(-55 to +150)							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	(-55 to +150)							$^{\circ}C$

Notes:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. Thermal resistance from junction to ambient P.C.B. mounted with 0.375”(9.5mm)lead length with 2.5”×2.5”(63.5×63.5cm) copper pads



SB320 THRU SB3100

VOLTAGE RANGE 20 to 100 Volts  
CURRENT 3.0 Ampere

RATING AND CHARACTERISTIC CURVES SB320 THRU SB3100

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

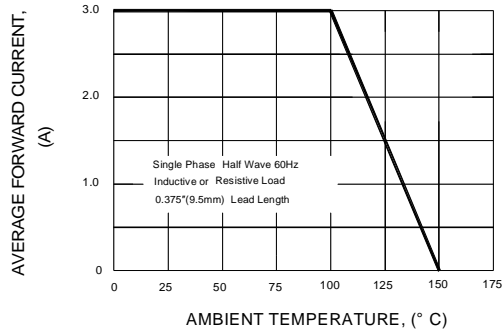


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

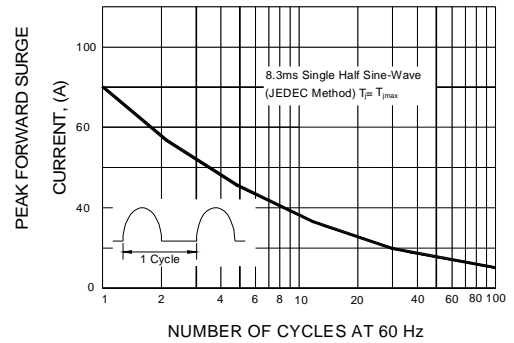


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

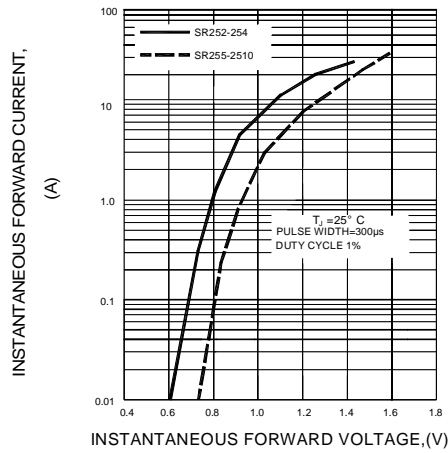


FIG.4-TYPICAL REVERSE CHARACTERISTICS

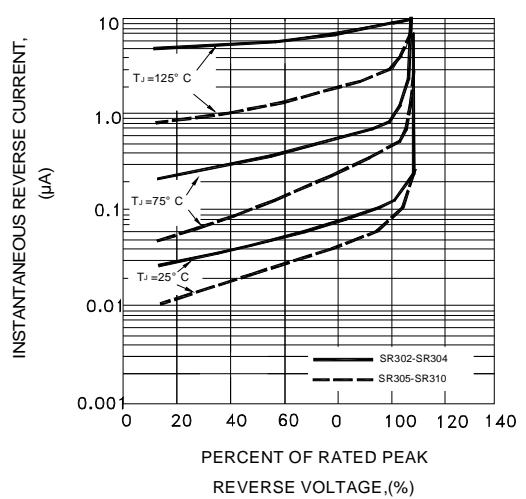


FIG.5-TYPICAL JUNCTION CAPACITANCE

