

SB1020 THRU SB1080

10.0AMP SCHOTTKY BARRIER RECTIFIERS



FEATURES

- . Low forward voltage drop
- . High current capability
- . High reliability
- . High surge current capability
- . Epitaxial construction

MECHANICAL DATA

- . Case: Molded plastic
 - . Epoxy: UL 94V-0 rate flame retardant
 - . Lead: Axial leads, solder able per MIL-STD-202, method 208 guaranteed
 - . Polarity: Color band denotes cathode end
- Mounting position: Any
Weight: 1.65grams

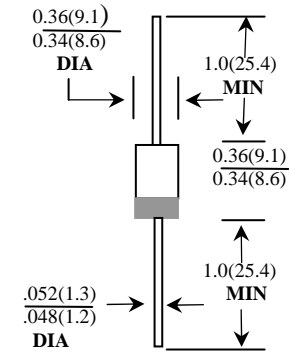
VOLTAGE RANGE

20 to 80 Volts

CURRENT

10.0AMPERES

R-6



Dimensions in inches and(millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SB1020	SB1030	SB1040	SB1050	SB1060	SB1080	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	V
Maximum RMS Voltage	14	21	28	35	42	56	V
Maximum Voltage	20	30	40	50	60	80	V
Maximum Average Forward Rectified Current See Fig. 1	10.0						A
Peak Forward Surge Current, 8.3 ms single half sine-wave Superimposed on rated load (JEDEC method)	150						A
Maximum instantaneous Forward Voltage at 5.0A	0.55		0.70		0.85		V
Maximum DC Reverse Current At Rated DC Blocking Voltage	0.5						mA
Typical Thermal Resistance R θ JA (Note 2)	50						mA
Typical Thermal Resistance R θ JA (Note 2)	8						°C/W
Operating Temperature Range Tj	-65----+125			-65----+150			°C
Storage Temperature Range T _{STG}	-65----+150						°C

NOTES:

1. Measured at 1MHz and applied voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5”(12.7mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SB1020 THRU SB1080)

FIG.2-TYPICAL FORWARD CHARACTERISTICS

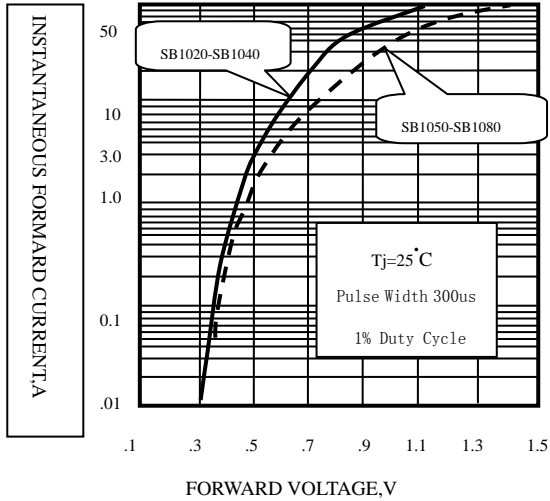


FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

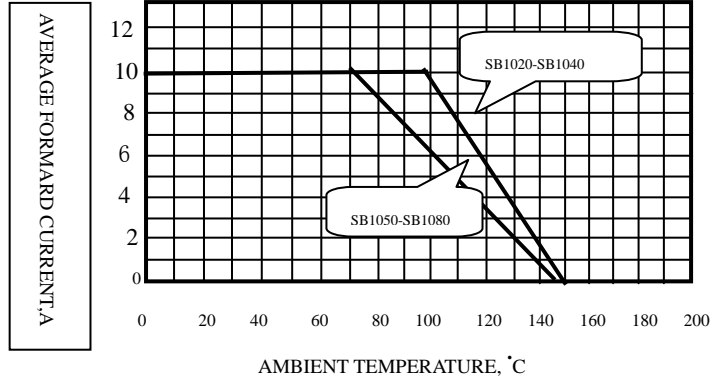


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

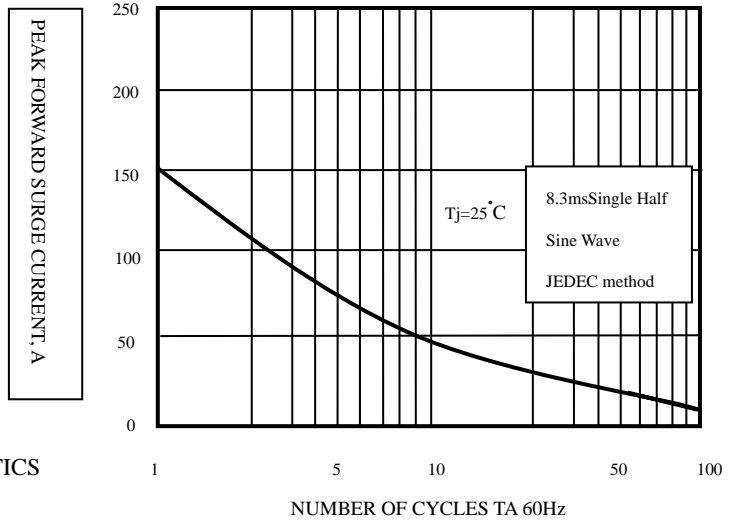


FIG.5-TYPICAL REVERSE CHARACTERISTICS

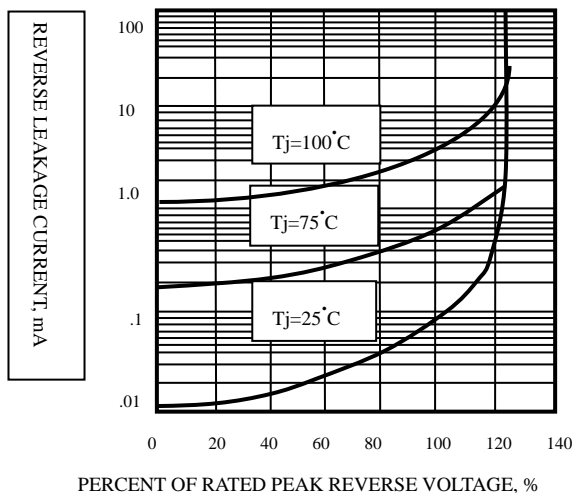


FIG.4-TYPICAL JUNCTION CAPACITANCE

