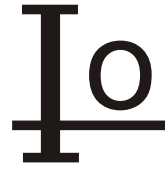


# SB2020 THRU SB20100

20.0 AMP SCHOTTKY BARRIER RECTIFIERS



## FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction
- \* Lead Free Finish/RoHS Compliant

## MECHANICAL DATA

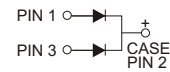
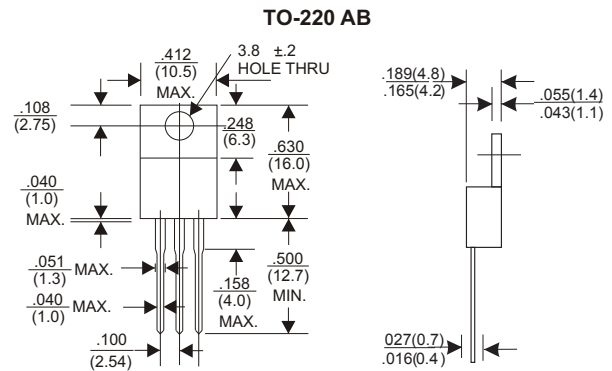
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any
- \* Weight: 1.81 grams

## VOLTAGE RANGE

20 to 100Volts

## CURRENT

20.0 Ampere



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	SB2020	SB2030	SB2040	SB2050	SB2060	SB2080	SB20100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current See Fig. 1	20							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Instantaneous Forward Voltage per Leg at 10.0A	0.65		0.75		0.85			V
Maximum DC Reverse Current Ta=25°C	500							uA
at Rated DC Blocking Voltage Ta=100°C	100							mA
Typical Junction Capacitance (Note1)	700					460		pF
Typical Thermal Resistance R JC (Note 2)	100							°C/W
Operating Temperature Range Tj	-65 — +125					-65 — +150		°C
Storage Temperature Range TSTG	-65 — +150							°C

### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.

# RATING AND CHARACTERISTIC CURVES (SB2020 THRU SB20100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

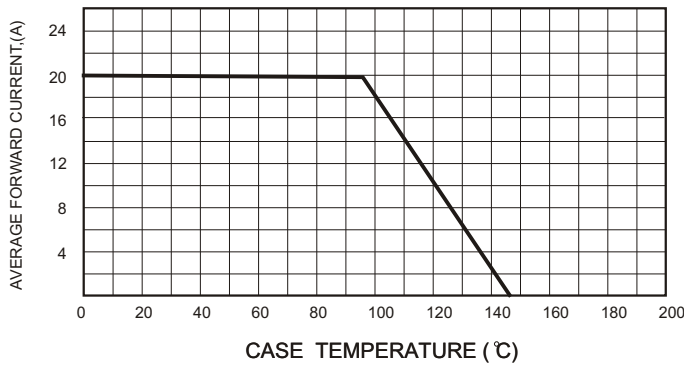


FIG.2-TYPICAL FORWARD CHARACTERISTICS

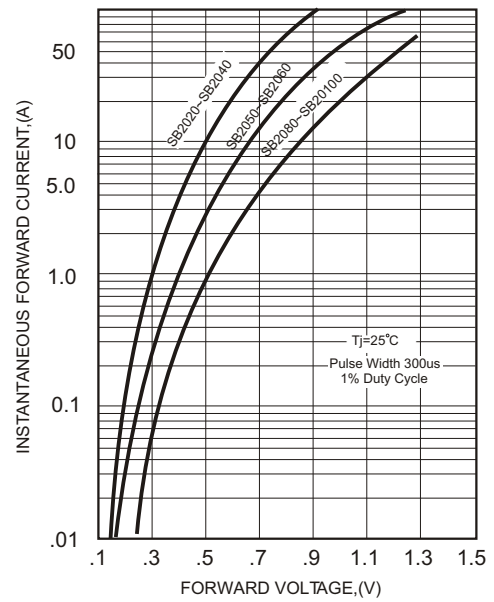


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

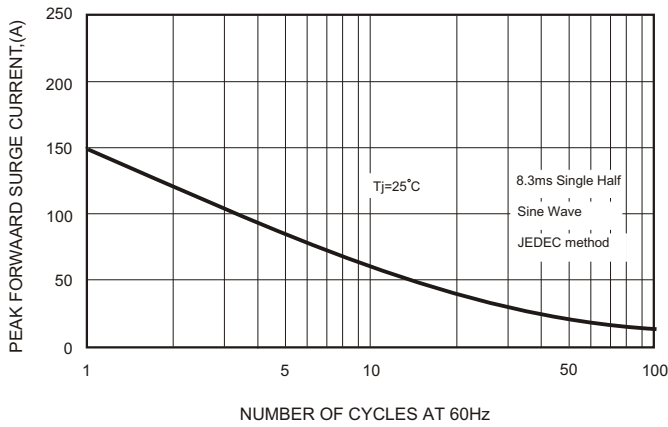


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

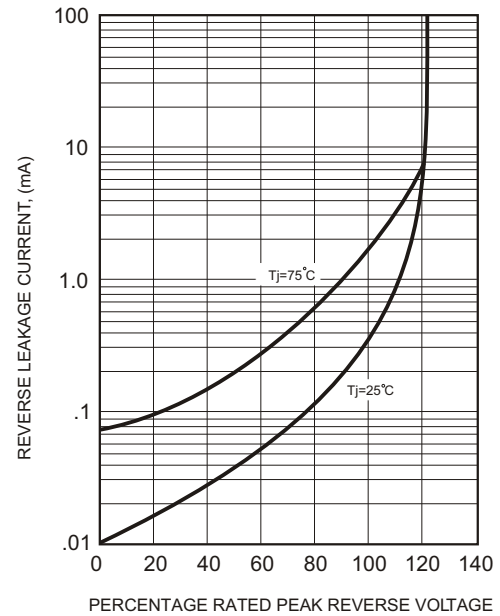


FIG.4-TYPICAL JUNCTION CAPACITANCE

