SB820 THRU SB860

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 20 TO 60V **CURRENT: 8.0A**

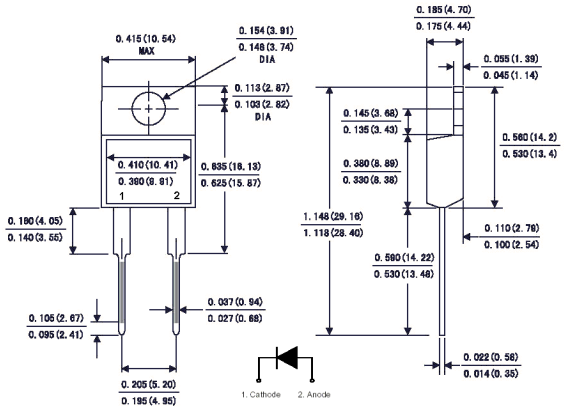
FEATURE

High current capability, Low forward voltage drop
Low power loss, high efficiency
High surge capability

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity: AS MARKED
Mounting position: any

TO-220AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	SB 820	SB 830	SB 835	SB 840	SB 845	SB 850	SB 860	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	20	30	35	40	45	50	60	V
Maximum RMS Voltage	Vrms	14	21	25	28	32	35	42	V
Maximum DC blocking Voltage	Vdc	20	30	35	40	45	50	60	V
Maximum Average Forward Rectified Current	If(av)	8.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150.0							A
Maximum Forward Voltage at 8.0A DC	Vf	0.65					0.75		V
Maximum DC Reverse Current Ta =25°C	Ir	1.0							mA
at rated DC blocking voltage Ta =100°C		15.0					50.0		mA
Typical Junction Capacitance (Note 1)	Cj	700					450		pF
Typical Thermal Resistance (Note 2)	R(jc)	2.5							°C/W
Storage and Operating Junction Temperature	Tstg,Tj	-65 to +125					-65 to +150		°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to CASE

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

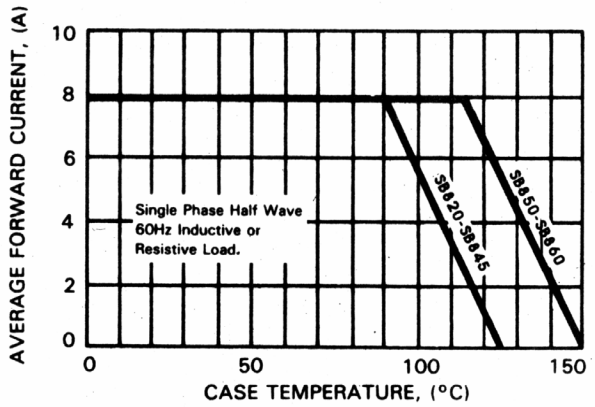


FIG. 2 – TYPICAL REVERSE CHARACTERISTICS

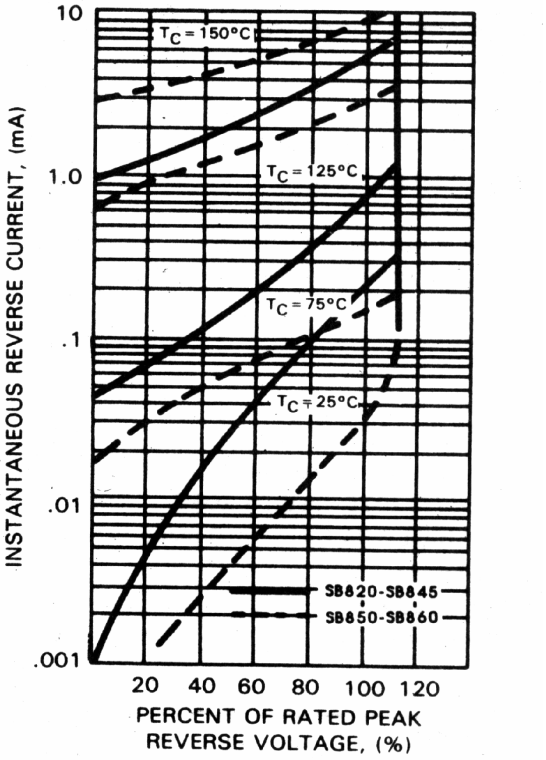


FIG. 3 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

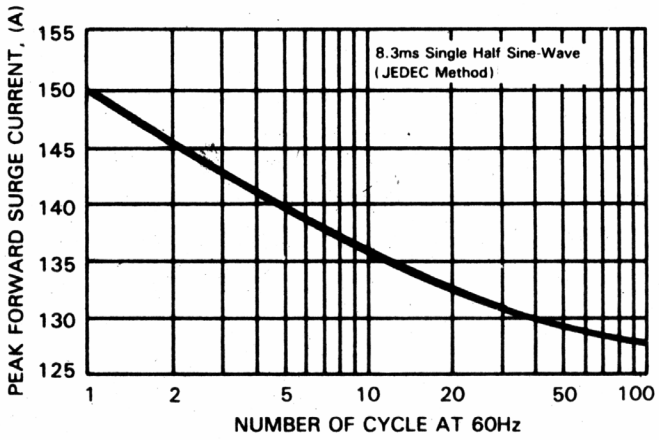


FIG. 4 – TYPICAL JUNCTION CAPACITANCE

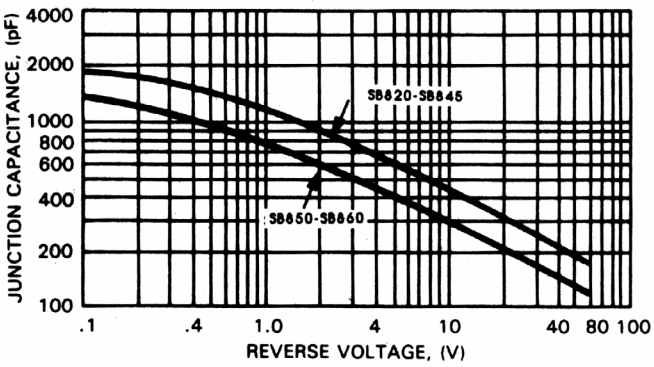
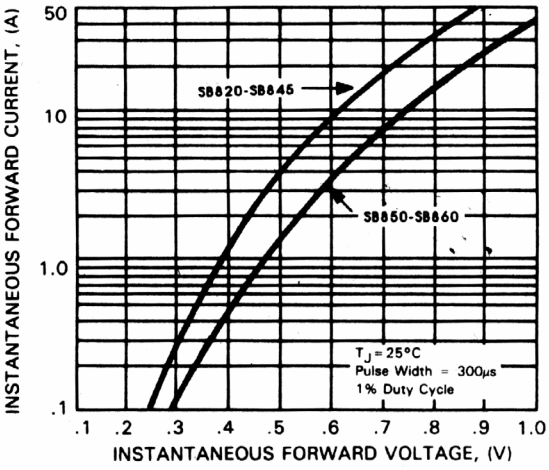


FIG. 5 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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