SB1020 THRU SB1060

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 20 TO 60V **CURRENT: 10.0A**

GULF SEMI

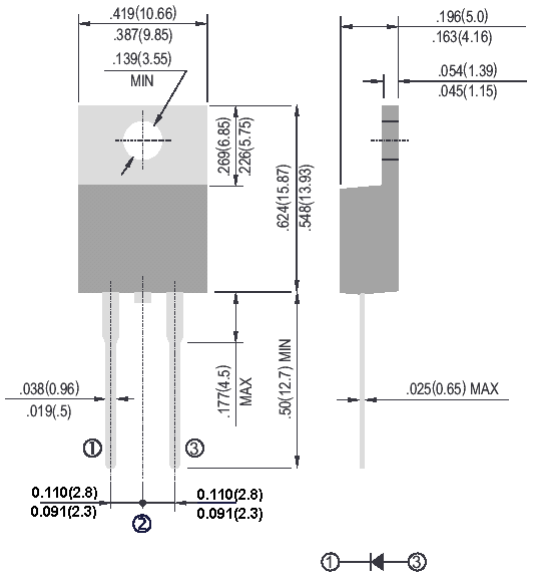
FEATURE

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℃, unless otherwise stated)

	SYMBOL	SB1020	SB 1030	SB 1040	SB 1050	SB 1060	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	20	30	40	50	60	V
Maximum RMS Voltage	Vrms	14	21	28	35	42	V
Maximum DC blocking Voltage	Vdc	20	30	40	50	60	V
Maximum Average Forward Rectified Current (See.Fig 1)	If(av)	10.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150.0					A
Maximum Forward Voltage at 10.0A DC	Vf	0.65			0.80		V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃ (Note 1)	Ir	1.0 30.0					mA mA
Typical Thermal Resistance (Note 2)	R(jc)	2.5					℃ /W
Storage and Operating Junction Temperature	Tstg,Tj	-65 to +125			-65 to +150		℃

Note：

1. Pules Test: 300Us Pulse Wiath ,1%Duty Cycle
2. Thermal Resistance From Junction To Case

FIG.1-FORWARD CURRENT DERATING CURVE

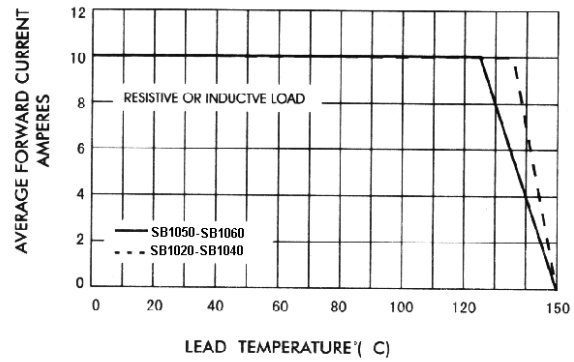


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

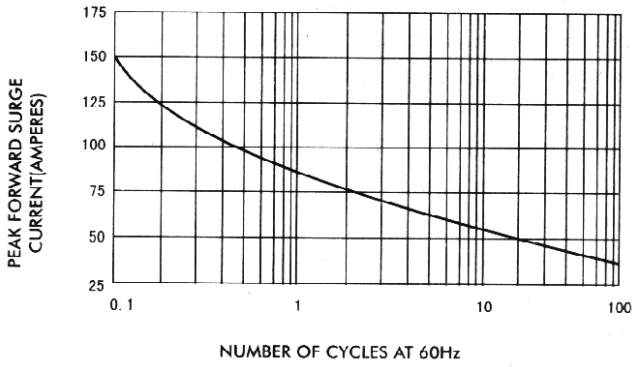


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

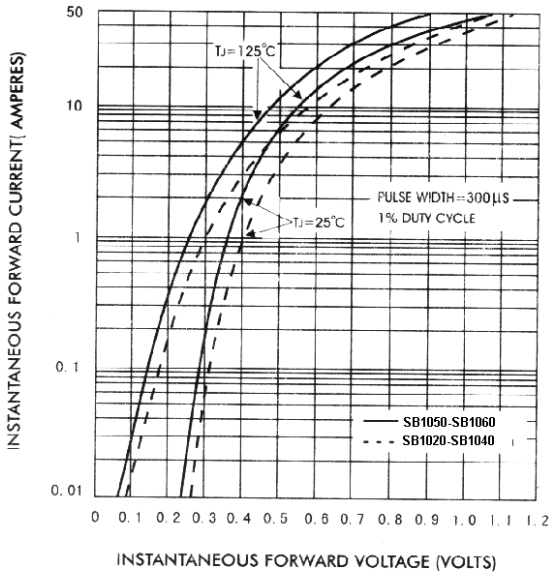


FIG.4-TYPICAL REVERSE CHARACTERISTICS

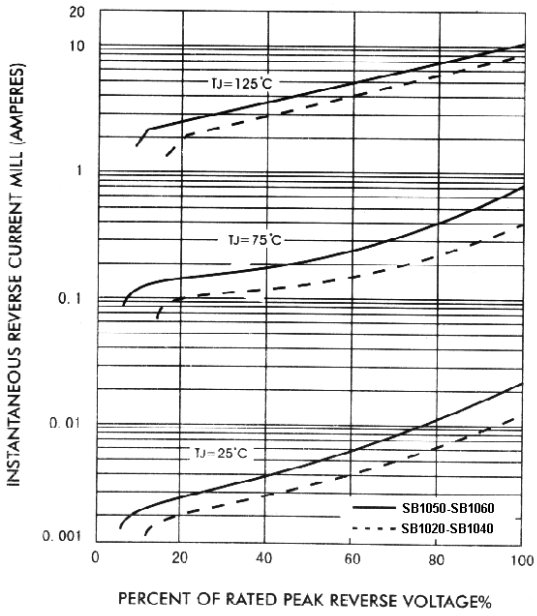


FIG.5-TYPICAL JUNCTION CAPACITANCE

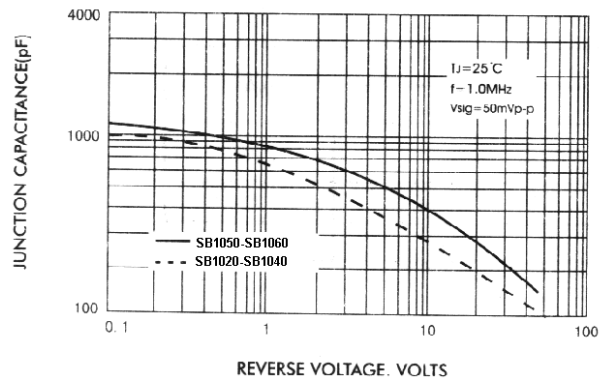


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCS