SB10EQ

SCHOTTKY BARRIER RECTIFIER

VOLTAGE: 100V CURRENT: 1.0A

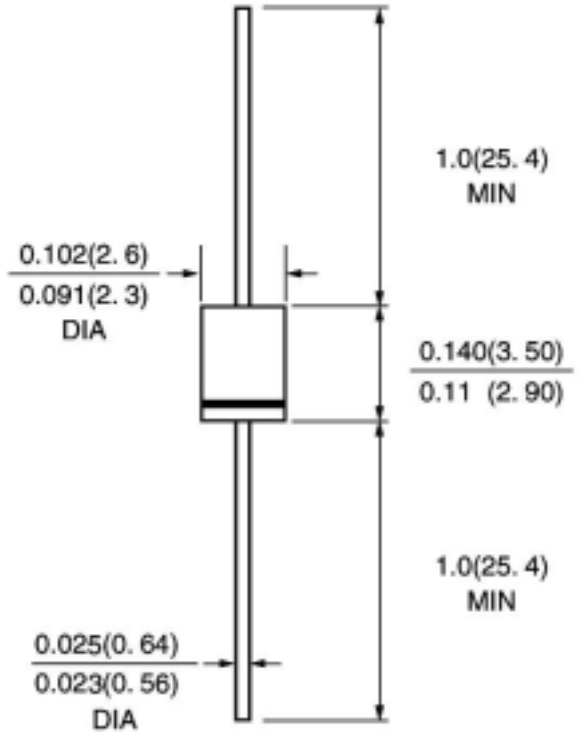
FEATURE

High current capability, Low forward voltage drop
Low power loss, high efficiency
High surge capability
High temperature soldering guaranteed
250°C /10sec/0.375" lead length at 5 lbs tension

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: color band denotes cathode
Mounting position: any

R-1



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	SB10EQ	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	100	V
Maximum RMS Voltage	Vrms	70	V
Maximum DC blocking Voltage	Vdc	100	V
Maximum Average Forward Rectified Current Without Fin or P.C.B Ta=25°C	If(av)	1.0	A
Peak Forward Surge Current 10ms single half sine-wave superimposed	Ifsm	40.0	A
Maximum Forward Voltage at 1.0A DC(Note 1)	Vf	0.85	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	Ir	0.5 10.0	mA mA
Typical Thermal Resistance (Note 2)	R θ (ja)	140.0	°C /W
Storage and Operating Junction Temperature	Tj	-40 to +150	°C

Note:

1. Pulse test :300uS pulse width ,1% duty cycle.
2. Thermal Resistance from Junction to Ambient at 0.5" lead length, vertical P.C. Board Mounted [1]

RATINGS AND CHARACTERISTIC CURVES SB10EQ

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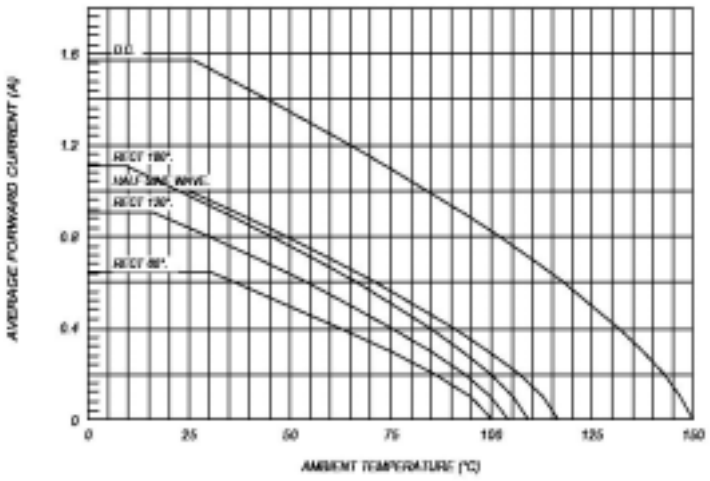
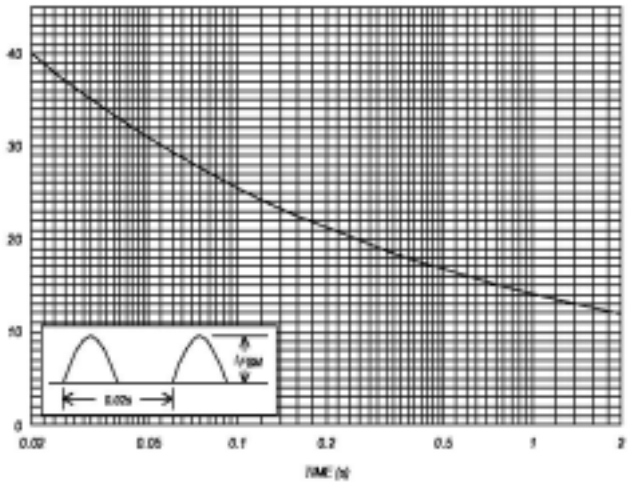
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board, V_{RM}=40V

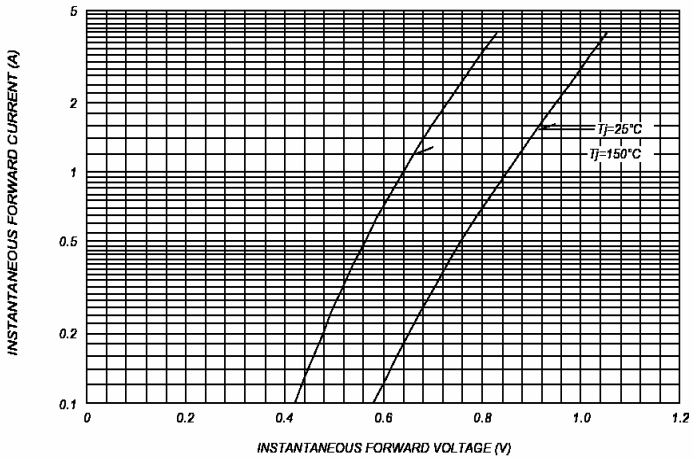


SURGE CURRENT RATINGS

f=50Hz,Half Sine Wave,Non-Repetitive,No Load

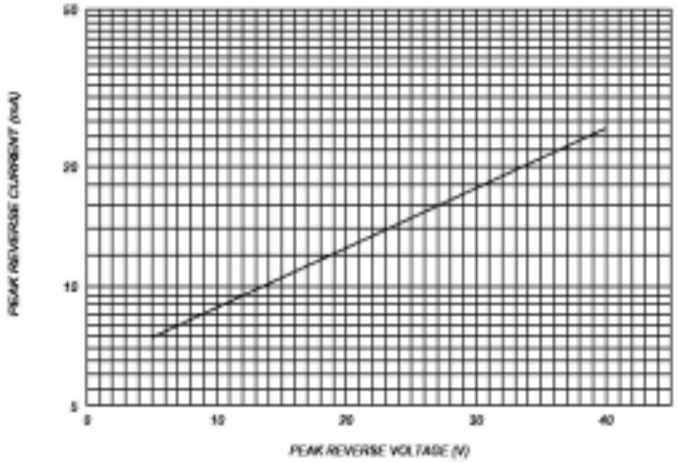


FORWARD CURRENT VS. VOLTAGE



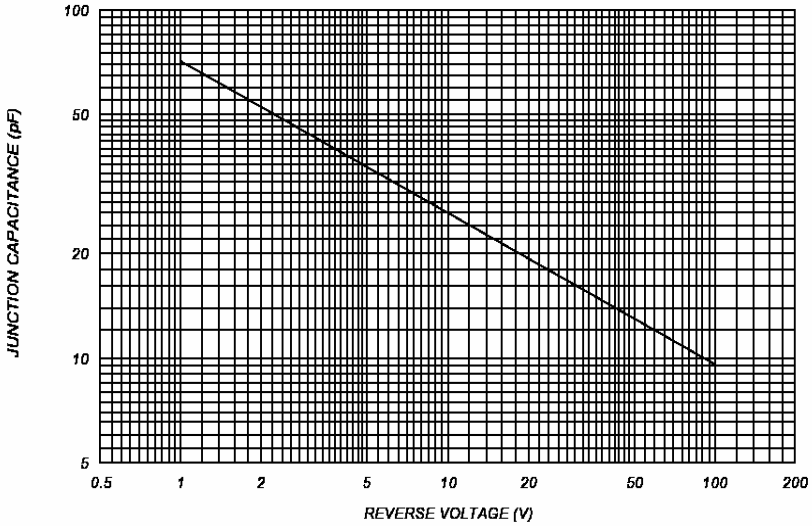
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

Tj= 150 °C



JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

Tj=25° C,Vm=20mV RMS,f=100kHz,Typical Value



- **Marking：**

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