SHANGHAI SUNRISE ELECTRONICS CO., LTD.

SB120 THRU SB160

SCHOTTKY BARRIER RECTIFIER

TECHNICAL SPECIFICATION

VOLTAGE: 20 TO 60V CURRENT: 1.0A

FEATURES

- Epitaxial construction for chip
- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed: 250°C/10sec/0.375"(9.5mm) 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-O recognized flame retardant epoxy
- Polarity: Color band denotes cathode
- Mounting position: Any

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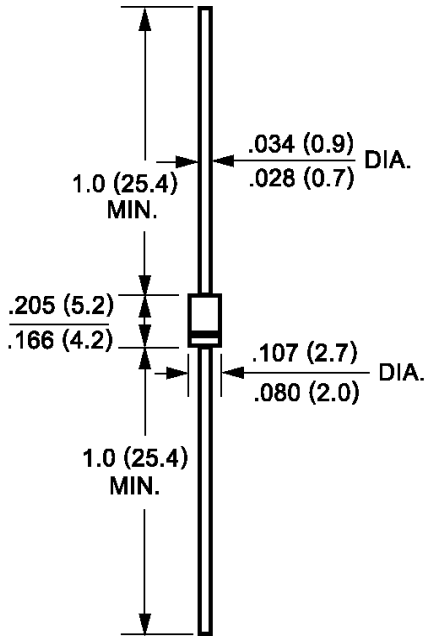

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	SB 120	SB 130	SB 140	SB 150	SB 160	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current (9.5mm lead length,at T_L=100°C)	$I_{F(AV)}$	1.0					A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I_{FSM}	40.0					A
Maximum Forward Voltage (at 1.0A DC)	V_F	0.5			0.7		V
Maximum DC Reverse Current T_a=25°C	I_R	1.0					mA
(at rated DC blocking voltage) T_a=100°C		10.0					mA
Typical Junction Capacitance (Note 1)	C_J	110					pF
Typical Thermal Resistance (Note 2)	R_{θ}(ja)	50					°C/W
Operating Junction Temperature	T_J	-65 to +125			-65 to +150		°C
Storage Temperature	T_{STG}	-65 to +150					°C

Note:

1.Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}

2.Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, vertical P.C. board mounted