

DATA SHEET

SB120E~SB160E

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volts **CURRENT** 1.0 Amperes

DO-41

Unit: inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage,high frequency inverters ,free wheeling , and polarity protection applications .
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request
- ESD Passed devices : Air mode 15KV ,human body mode 8KV

MECHANICALDATA

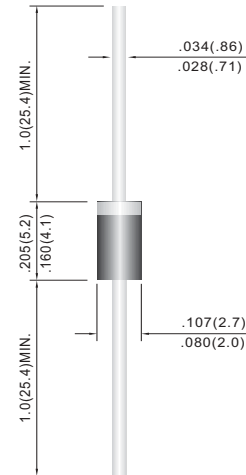
Case: DO-41 Molded plastic

Terminals: Axial leads, solderable per MIL-STD-202G,Method 208

Polarity: Color band denotes cathode

Mounting Position: Any

Weight: 0.012 ounces, 0.34grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	SB120E	SB130E	SB140E	SB150E	SB160E	UNITS
Maximum Recurrent 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 Curren .375" (9.5mm) lead length at TA =75°C	I _{AV}	1.0					A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	30					A
Maximum Forward Voltage at 1.0A	V _F	0.50			0.70		V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I _R	0.5 10					mA
Maximum Thermal Resistance	R _{θJA}	50					°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-50 TO +125					°C

RATING AND CHARACTERISTIC CURVES

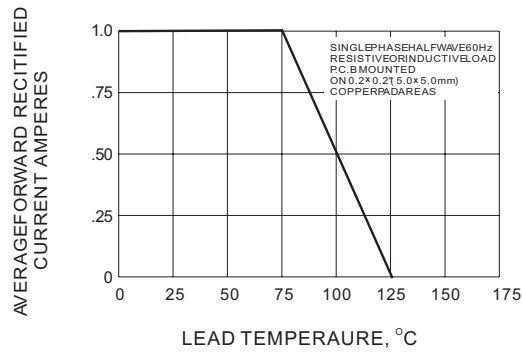


Fig.1- FORWARD CURRENT DERATING CURVE

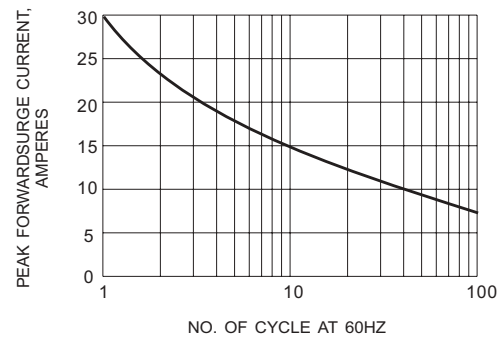


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

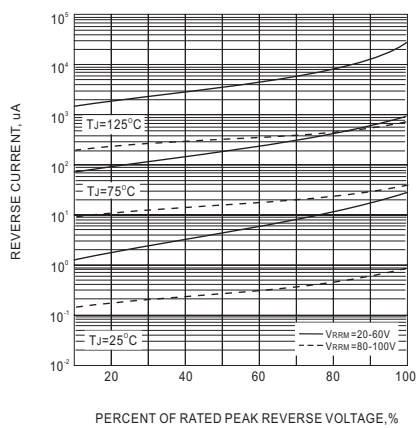


Fig.3- TYPICAL REVERSE CHARACTERISTIC

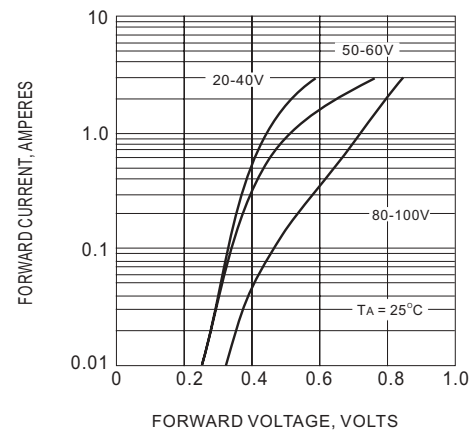


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC