



**SCHOTTKY BARRIER RECTIFIERS**

**VOLTAGE** 20 to 100 Volts **CURRENT** 1.0 Amperes

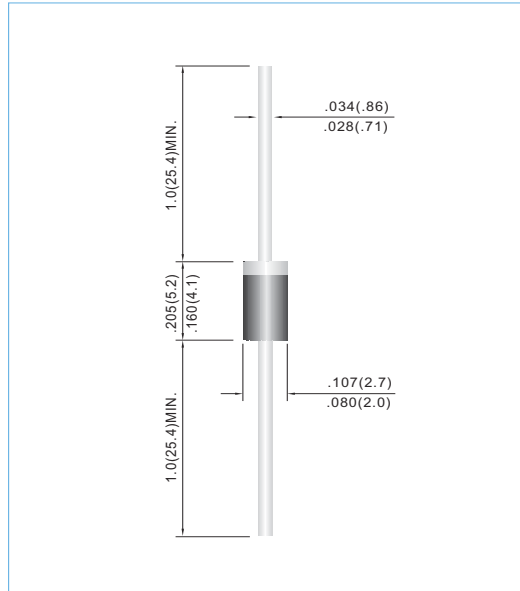
**DO-41** Unit: inch(mm)

**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

**MECHANICAL DATA**

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, 0.336 gram



**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	SB120	SB130	SB140	SB150	SB160	SB180	SB1100	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at TA =75°C	I <sub>AV</sub>	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	30							A
Maximum Forward Voltage at 1.0A	V <sub>F</sub>	0.50		0.70		0.85			V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I <sub>R</sub>	0.5				10			mA
Maximum Thermal Resistance	R <sub>θJA</sub>	50							°C / W
Operating Junction and Storage Temperature Rang	T <sub>J</sub> ,T <sub>STG</sub>	-50 TO +125							°C



## RATING AND CHARACTERISTIC CURVES

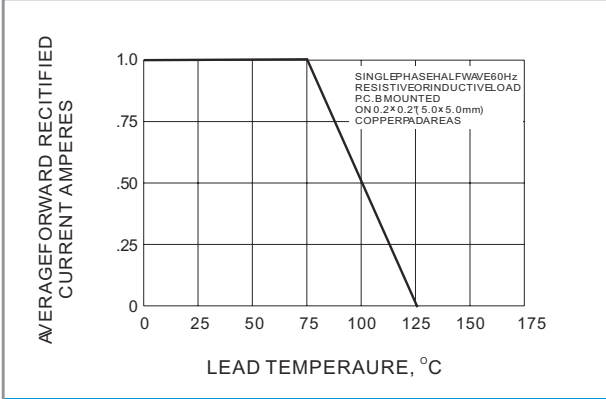


Fig.1- FORWARD CURRENT DERATING CURVE

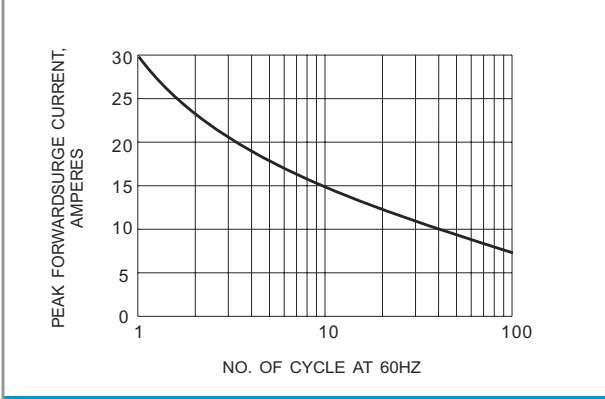


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

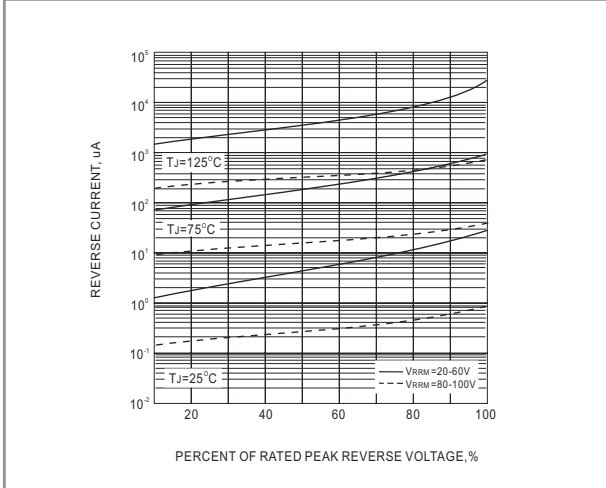


Fig.3- TYPICAL REVERSE CHARACTERISTIC

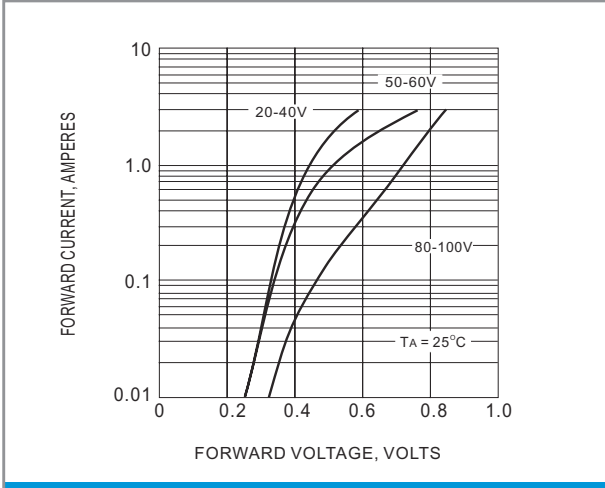


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC