

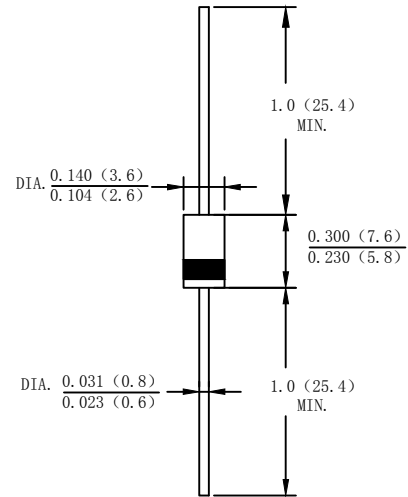
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic DO-15
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any

DO-15



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SB 220U	SB 230U	SB 240U	SB 245U	SB 250U	SB 260U	SB 280U	SB 2100U	SB 2150U	SB 2200U	SB 2250U	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	250	V	
Maximum RMS Voltage	V_{RMS}	14	21	26	31.5	35	42	56	80	105	140	175	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	250	V	
Average Rectified Output Current (Note 1) @ $T_L=75^\circ\text{C}$	I_o	2.0											A	
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	70											A	
Forward Voltage @ $I_F=2.0\text{A}$	V_{FM}	0.50			0.67			0.82		0.90		0.92	V	
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	0.1						0.05						mA
At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$		10.0						5.0						
Typical Junction Capacitance	C_J	220					180							pF
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	75.0											C/W	
Operating Temperature Range	T_J	-55 to + 150											°C	
Storage Temperature Range	T_{STG}	-55 to + 150											°C	

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. P.C.B. mounted with 0.2×0.2" (5.0×5.0mm) copper pad areas

FIG. 1 – FORWARD CURRENT DERATING CURVE

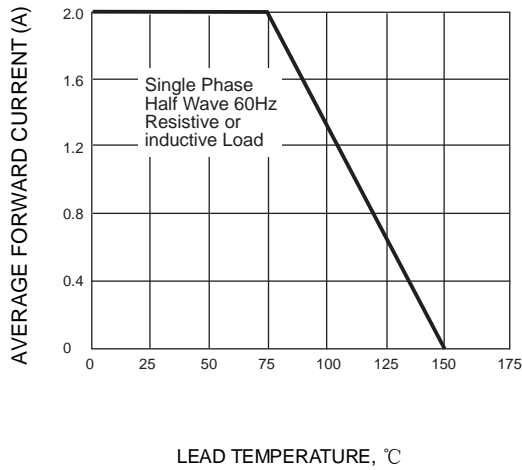


FIG.2-TYPICAL FORWARD CHARACTERISTICS

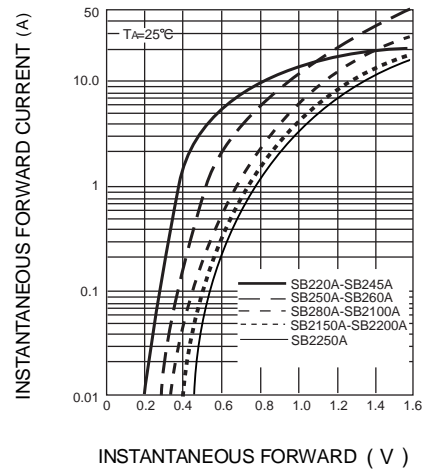


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

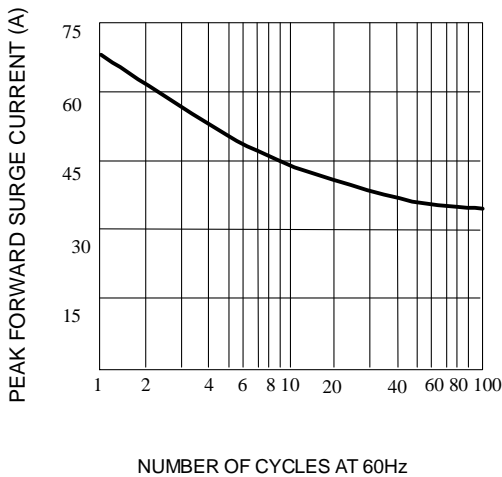


FIG. 4 – TYPICAL JUNCTION CAPACITANCE

