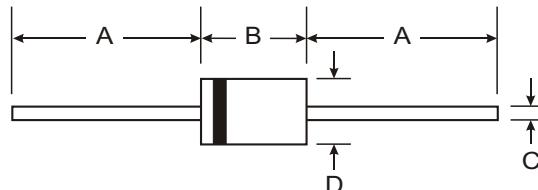


Features

**NOT RECOMMENDED FOR NEW DESIGN,
USE SB1X0 SERIES**

- High Current Capability and Low Forward Drop
- High Surge Capacity
- Guard Ring for Transient Protection
- Low Power Loss, High Efficiency



Mechanical Data

- Case: DO-41, Molded Plastic
- Plastic Material: UL Flammability Classification Rating 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Axial lead, Solderable per MIL-STD-202, Method 208
- Polarity: Cathode band
- Weight: 0.35 grams (approx.)

DO-41		
Dim	Min	Max
A	25.4	
B	4.1	5.2
C	0.71	0.86
D	2.0	2.7

All Dimensions in mm

Maximum Ratings and Electrical Characteristics

@ $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	SR102	SR103	SR104	SR105	SR106	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RSM}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current @ Lead Temperature (TL) measured 9.5mm lead length @ $T_L = 75^\circ\text{C}$ @ $T_L = 100^\circ\text{C}$	$I_{(AV)}$	1.0			1.0		A
Peak Forward Surge Current 8.3ms half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25					A
Maximum Forward Voltage @ 1.0A	V_F	0.55		0.60	0.70		V
Maximum Average Reverse Current at Peak Reverse Voltage @ $T_A = 25^\circ\text{C}$ @ $T_A = 100^\circ\text{C}$	I_R	1.0			10		mA
Typical Thermal Resistance (Note 1)	R_{JL}	15					K/W
Typical Total Capacitance (Note 2)	C_T	110			80		pF
Storage and Operating Temperature Range	T_J, T_{STG}	-65 to +150					C

Notes: 1. Thermal Resistance from Junction to Ambient with Vertical PC Board Mounting, 1.27mm Lead Length.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V.

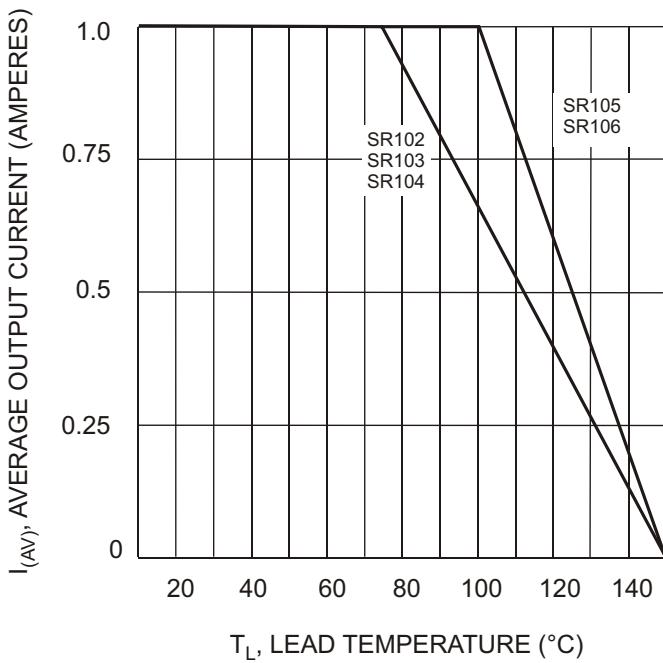


Fig. 1, Forward Current Derating Curve

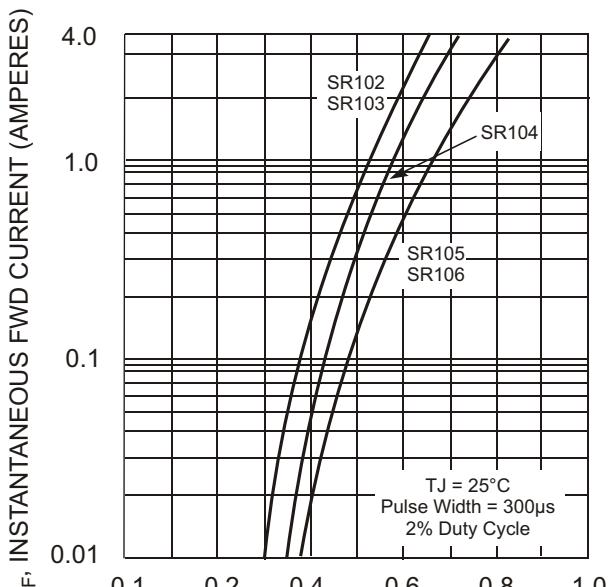


Fig. 2, Typical Forward Characteristics

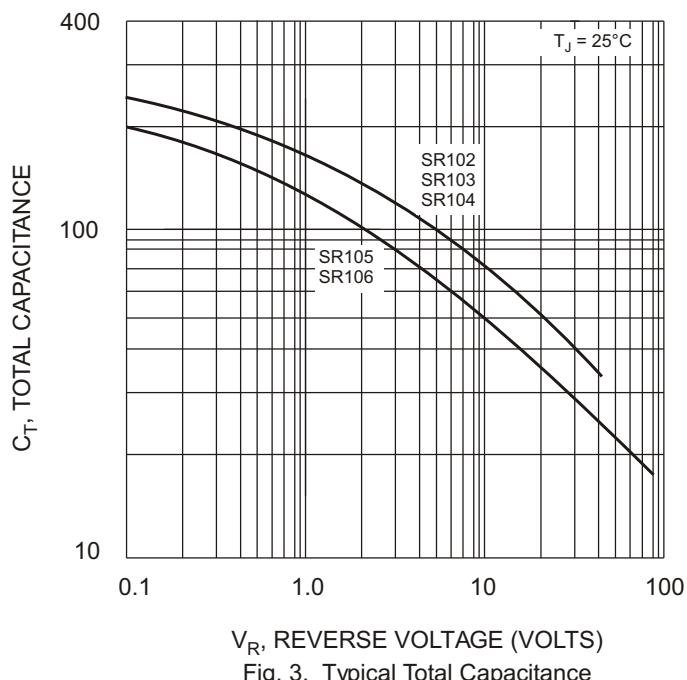


Fig. 3, Typical Total Capacitance

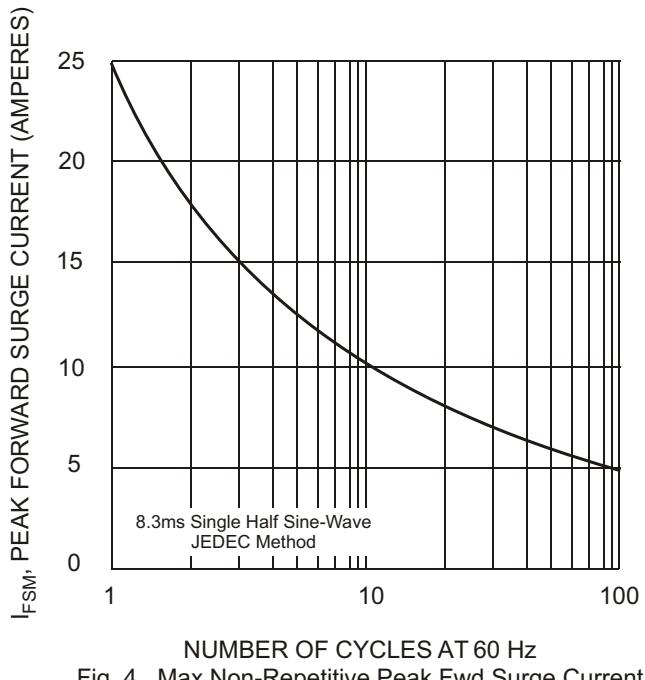


Fig. 4, Max Non-Repetitive Peak Fwd Surge Current

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