



SR002 THRU SR006

0.5 AMP. Schottky Barrier Rectifiers



Voltage Range
20 to 60 Volts
Current
0.5 Ampere

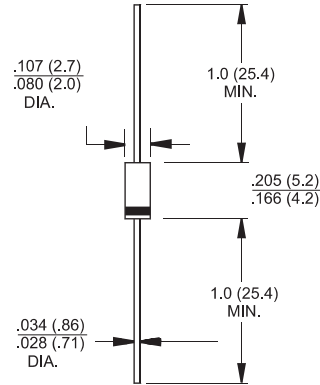
Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

Mechanical Data

- ✧ Cases: DO-41 molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode end
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 0.33 gram

DO-41



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	SR002	SR003	SR004	SR005	SR006	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 Current See Fig. 1	$I_{(AV)}$	0.5					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	40					A
Maximum Instantaneous Forward Voltage @ 0.5A	V_F	0.55			0.70		V
Maximum D.C. Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	0.5			0.5		mA
		5.0			10		mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	50					°C/W
Typical Junction Capacitance (Note 2)	C_J	110			80		pF
Operating Junction Temperature Range	T_J	- 65 to +125			-65 to +150		°C
Storage Temperature Range	T_{STG}	-65 to +150					°C

Notes: 1. Mount on Cu-Pad Size 5mm x 5mm on P.C.B.

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SR002 THRU SR006)

FIG.1- FORWARD CURRENT DERATING CURVE

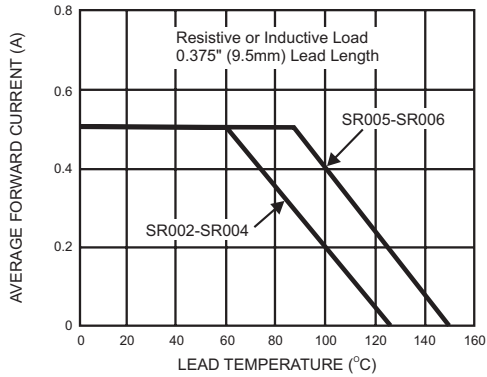


FIG.2- TYPICAL FORWARD CHARACTERISTICS

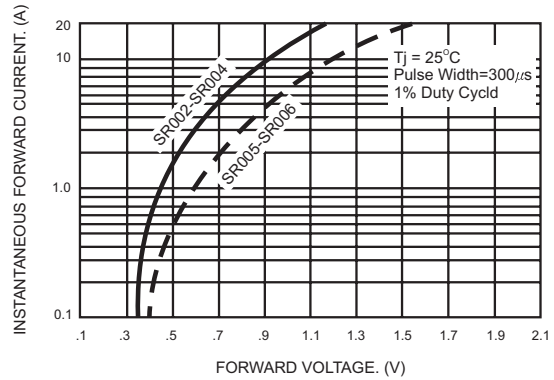


FIG.3- TYPICAL REVERSE CHARACTERISTICS

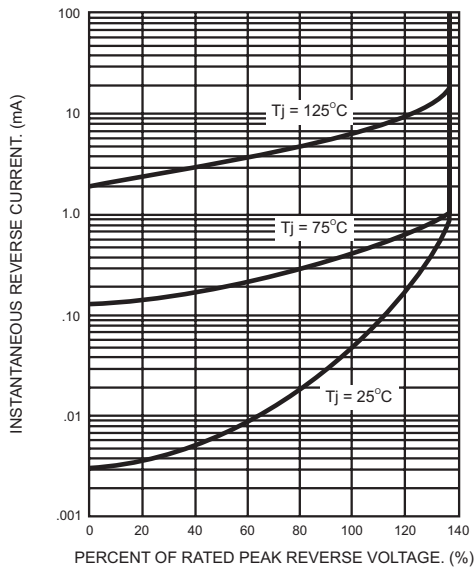


FIG.4- TYPICAL JUNCTION CAPACITANCE

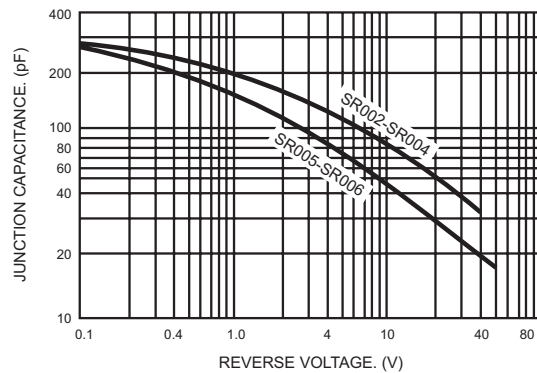


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

