SR2020 THRU SR2060

20.0 AMPS. Schottky Barrier Rectifiers

Voltage Range
20 to 60 Volts
Current
20.0 Amperes

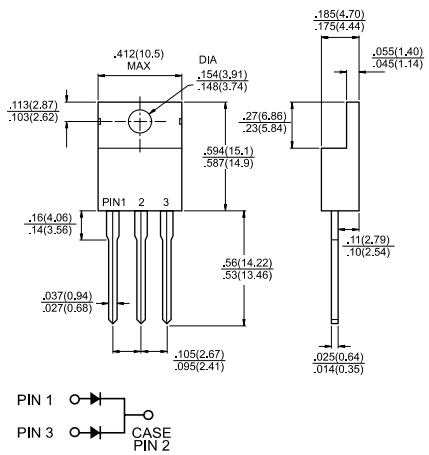
Features

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

Mechanical Data

- ✧ Cases: TO-220 molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Terminals: Lead solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed:
- ✧ 250°C/10 seconds .25",(6.35mm) from case.
- ✧ Weight: 2.24 grams

TO-220



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	SR2020	SR2030	SR2040	SR2050	SR2060	Units
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	V
Maximum RMS Voltage	14	21	28	35	42	V
Maximum DC Blocking Voltage	20	30	40	50	60	V
Maximum Average Forward Rectified Current See Fig. 1	20.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	250					A
Maximum Instantaneous Forward Voltage @ 10.0A	0.55			0.70		V
Maximum D.C. Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	1.0 50					mA mA
Typical Thermal Resistance (Note 1) $R_{\theta JC}$	2.0					°C/W
Typical Junction Capacitance (Note 2)	600			400		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. Thermal Resistance from Junction to Case Per Leg
2. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SR2020 THRU SR2060)

FIG.1- FORWARD CURRENT DERATING CURVE

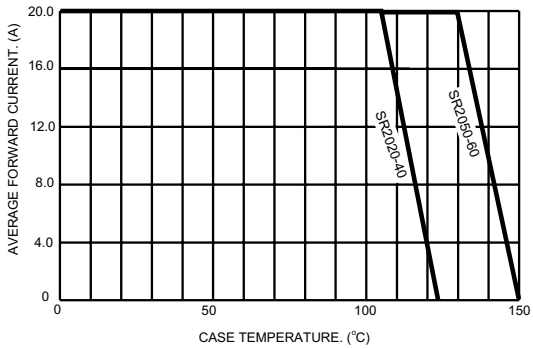


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

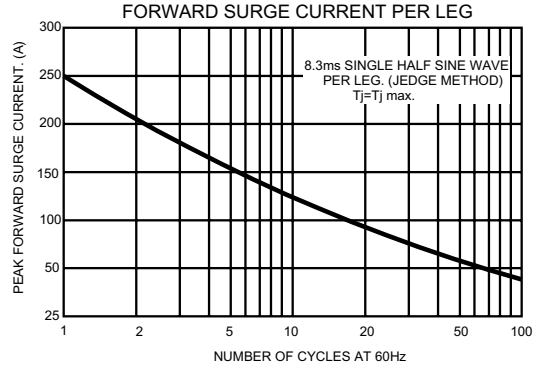


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

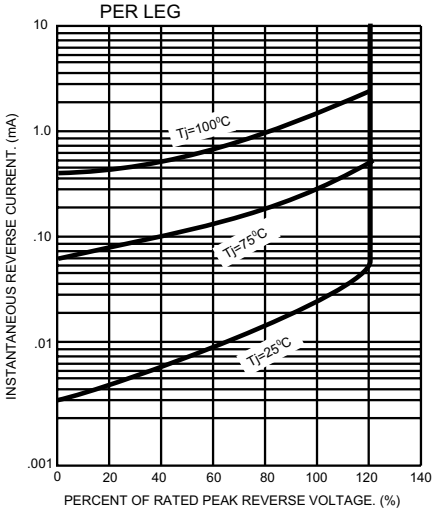


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

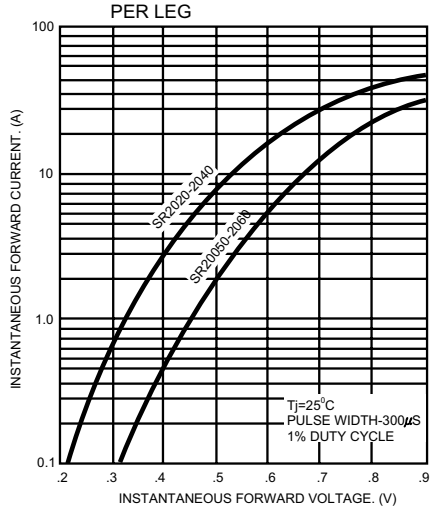


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG