



# SR2020 THRU SR2060

**20.0 AMPS. SCHOTTKY BARRIER RECTIFIERS**

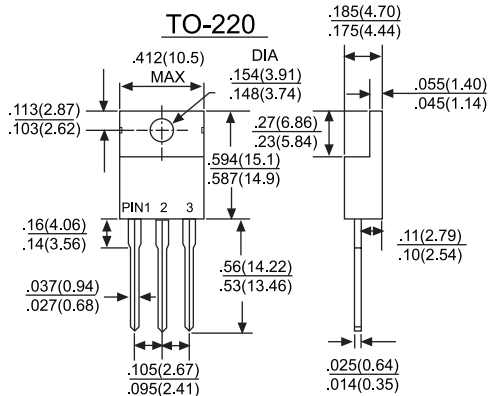
**Voltage Range  
20 to 60 Volts  
Current  
20.0 Amperes**

**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
- Lead: Axial leads, 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



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		SR2020	SR2030	SR2040	SR2050	SR2060	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Rectified Current See Fig.1	I <sub>F(AV)</sub>	20.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	250					A
Maximum Instantaneous Forward Voltage @10.0A	V <sub>F</sub>	0.55		0.70			V
Maximun DC Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 125°C	I <sub>R</sub>	1.0 50					mA mA
Typical Thermal Resistance(Note 1)	R <sub>θJC</sub>	2.0					°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	600			400		pF
Operating Junction Temperature Range	T <sub>J</sub>	-65 to +125			-65 to +150		°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150					°C

NOTES: 1. Thermal Resistance from Junction to Case Per Leg  
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

# RATING AND CHARACTERISTIC CURVES SR2020 THRU SR2060



FIG.1- FORWARD CURRENT DERATING CURVE

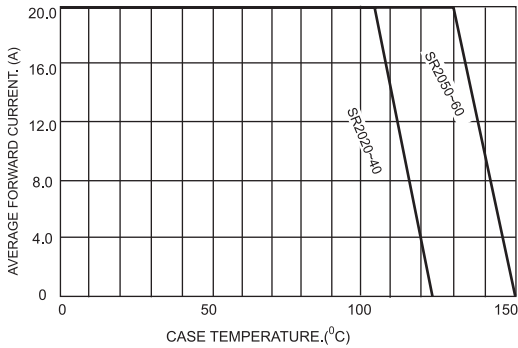


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

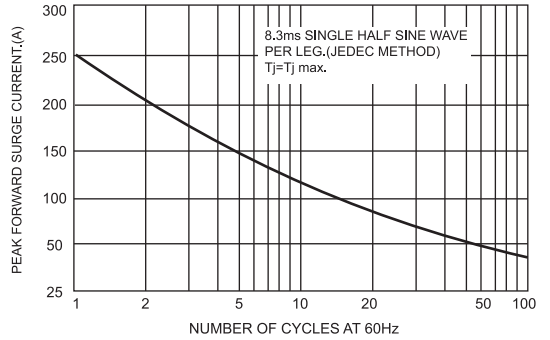


FIG.3-TYPICAL REVERSE CHARACTERISTICS PER LEG

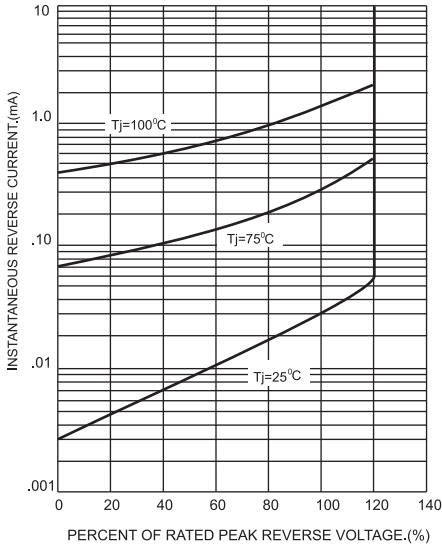


FIG.4-TYPICAL FORWARD CHARACTERISTICS PER LEG

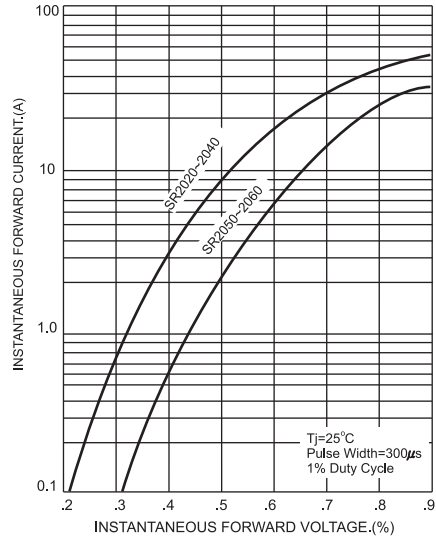


FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG

