



# SR3020PT THRU SR3060PT

## 30.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
20 to 60 Volts  
Current  
30.0 Amperes

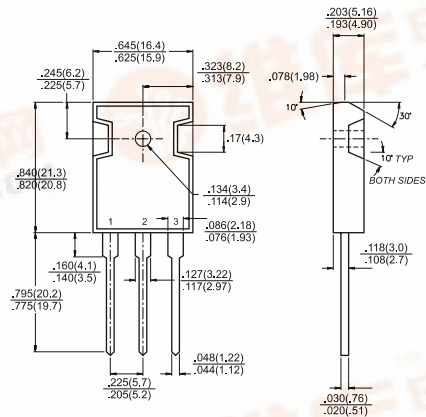
### Features

- ◇ Dual rectifier construction, positive center-tap
- ◇ Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- ◇ Metal silicon junction, majority carrier conduction
- ◇ Low power loss, high efficiency
- ◇ High current capability, low VF
- ◇ High surge capability
- ◇ Epitaxial construction
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◇ High temperature soldering guaranteed: 250°C/10seconds, 0.17" (4.3mm) lead lengths at 5 lbs., (2.3kg) tension

### Mechanical Data

- ◇ Cases: JEDEC TO-3P/TO-247AD molded plastic
- ◇ Terminals: Leads solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Mounting position: Any
- ◇ Weight: 0.2 ounce, 5.6 grams

### TO-3P/TO-247AD



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	SR3020PT	SR3030PT	SR3040PT	SR3050PT	SR3060PT	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 at Tc=100°C	30					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	275					A
Maximum Instantaneous Forward Voltage @ 15.0A (Note 3)	0.55		0.70			V
Maximum D.C. Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	1.0					mA
	75					mA
Typical Thermal Resistance Per Leg (Note 1)	1.5					°C/W
Typical Junction Capacitance (Note 2)	750		500			pF
Operating Junction Temperature Range Tj	-65 to +125		-65 to +150			°C
Storage Temperature Range TSTG	-65 to +150					°C

Notes: 1. Thermal Resistance from Junction to Case Per Leg.

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

3. 300 us Pulse Width, 2% Duty Cycle



## RATINGS AND CHARACTERISTIC CURVES (SR3020PT THRU SR3060PT)

FIG.1- FORWARD CURRENT DERATING CURVE

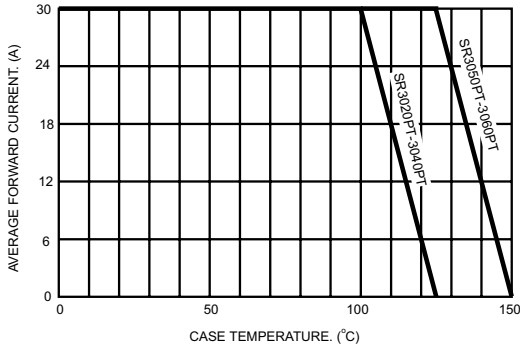


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

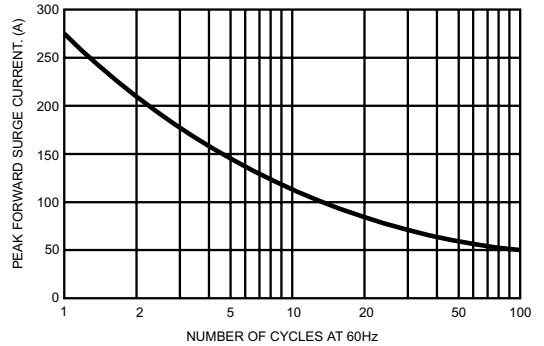


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

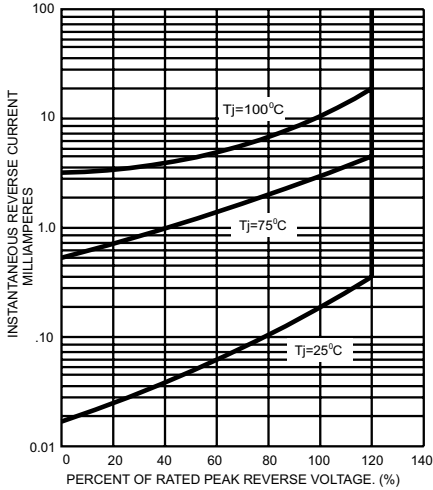


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

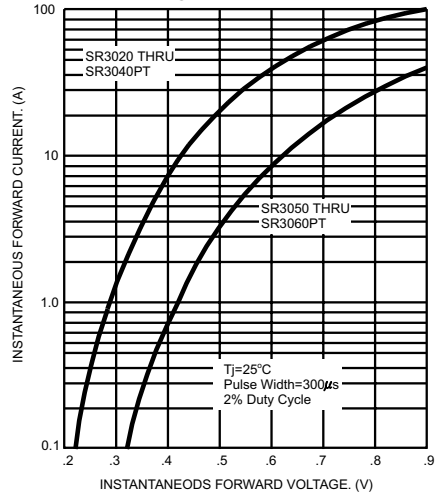


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

