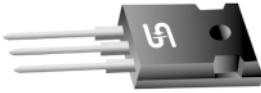




# SR2020PT THRU SR2060PT

## 20.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
20 to 60 Volts  
Current  
20.0 Amperes

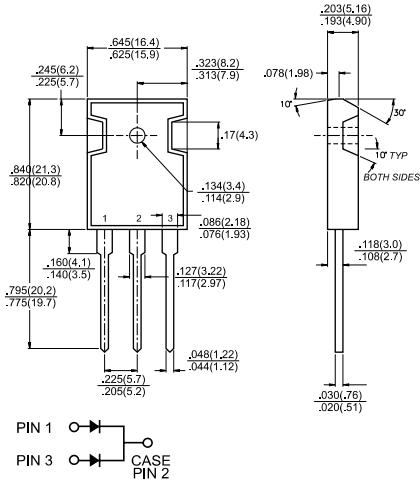
### Features

- ✧ 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
- ✧ Guardring for transient protection
- ✧ 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	SR2020PT	SR2030PT	SR2040PT	SR2050PT	SR2060PT	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 T <sub>c</sub> =105°C	20					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 (Note 3)	0.550			0.700		V
Maximum D.C. Reverse Current @ T <sub>c</sub> =25°C at Rated DC Blocking Voltage @ T <sub>c</sub> =100°C	1.0			50		mA
Typical Thermal Resistance Per Leg (Note 1)	1.5					°C/W
Typical Junction Capacitance (Note 2)	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 4.0V D.C.

3. 300 us Pulse Width, 2% Duty Cycle

## RATINGS AND CHARACTERISTIC CURVES (SR2020PT THRU SR2060PT)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

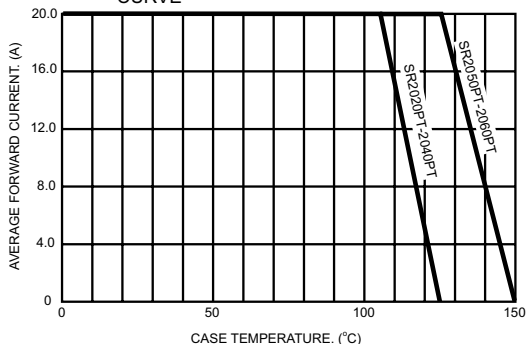


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

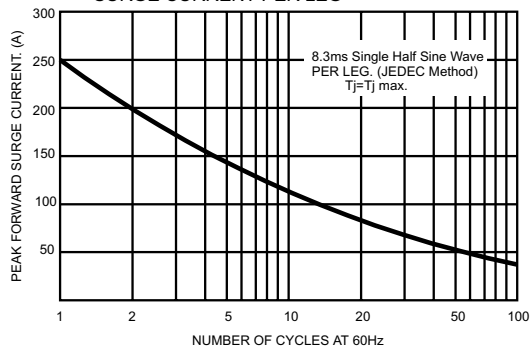


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

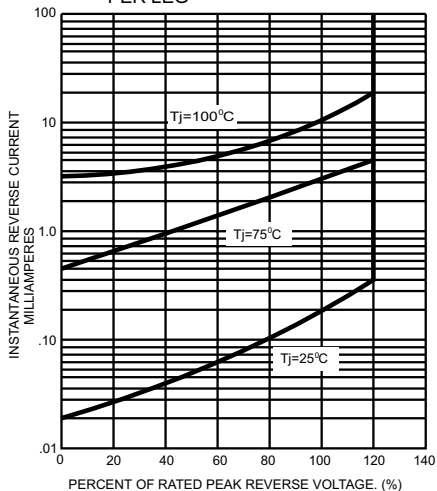


FIG.4- TYPICAL FORWARD CHARACTERISTICS

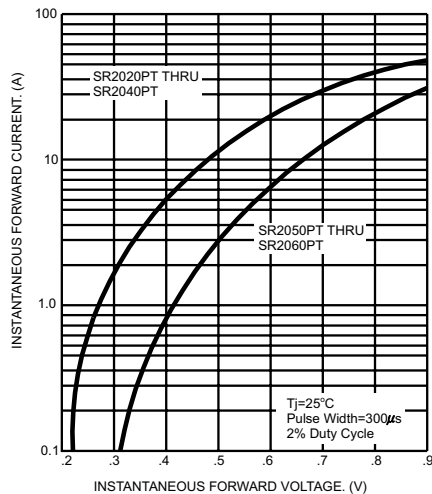


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

