



# SR2020PT THRU SR2060PT

## 20.0 AMPS. Schottky Barrier Rectifiers



Voltage Range  
20 to 60 Volts  
Current  
20.0 Amperes

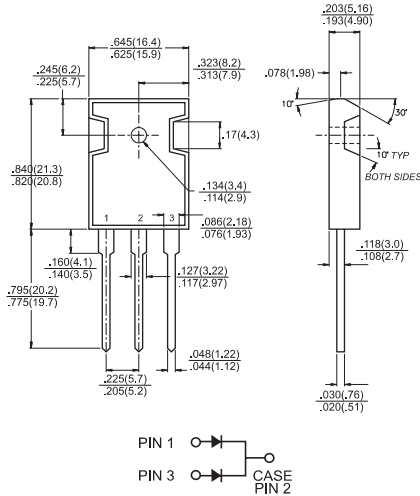
### Features

- ✦ 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:  
260°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	Symbol	SR 2020PT	SR 2030PT	SR 2040PT	SR 2050PT	SR 2060PT	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 at $T_c=105^\circ\text{C}$	$I_{(AV)}$	20					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	250					A
Maximum Instantaneous Forward Voltage @ 10.0A (Note 3)	$V_F$	0.55			0.70		V
Maximum D.C. Reverse Current @ $T_c=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_c=100^\circ\text{C}$	$I_R$	1.0 50					mA mA
Typical Thermal Resistance Per Leg (Note 1)	$R_{\theta_{JC}}$	1.5					$^\circ\text{C}/\text{W}$
Typical Junction Capacitance (Note 2)	$C_j$	600			400		pF
Operating Junction Temperature Range	$T_J$	-65 to +125			-65 to +150		$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +150					$^\circ\text{C}$

Notes: 1. Thermal Resistance from Junction to Case Per Leg, with Heatsink size 4" x 6" x 0.25" Al-Plate..

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)

