

SR2020PT THRU SR2060PT

20.0 AMPS. Schottky Barrier Rectifiers



Voltage Range 20 to 60 Volts Current 20.0 Amperes

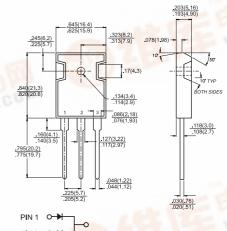
Features

- 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



PIN 3 O CASE PIN 2

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%

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 Tc=105°C			20	_ 44	11/1	Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		西西	250	B = 1	2.	Α
Maximum Instantaneous Forward Voltage @10.0A (Note 3)	7 W.	0.550			0.700	
Maximum D.C. Reverse Current @ Tc=25°C	W.D.	1.0				
at Rated DC Blocking Voltage @ Tc=100°C		50				
Typical Thermal Resistance Per Leg (Note 1)		1.5				
Typical Junction Capacitance (Note 2)	600			400		pF
Operating Junction Temperature Range T _J	-65 to +125			-65 to +150		°C
Storage Temperature Range Tstg		-65 to +150				

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

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

3300 us Pulse Width, 2% Duty Cycle





RATINGS AND CHARACTERISTIC CURVES (SR2020PT THRU SR2060PT)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

20.0

(4) 16.0

12.0

4.0

0

CASE TEMPERATURE, (°C)

FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG 300 PEAK FORWARD SURGE CURRENT. (A) 8.3ms Single Half Sine Wave PER LEG. (JEDEC Method) Tj=Tj max. 250 200 150 100 50 2 5 10 20 50 100 NUMBER OF CYCLES AT 60Hz

FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

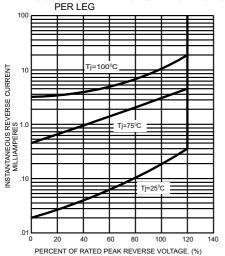


FIG.4- TYPICAL FORWARD CHARACTERISTICS

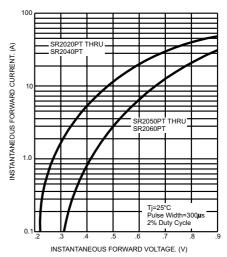


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

