



SR3020PT THRU SR3060PT

30.0 AMPS. Schottky Barrier Rectifiers



Voltage Range
20 to 60 Volts
Current
30.0 Amperes

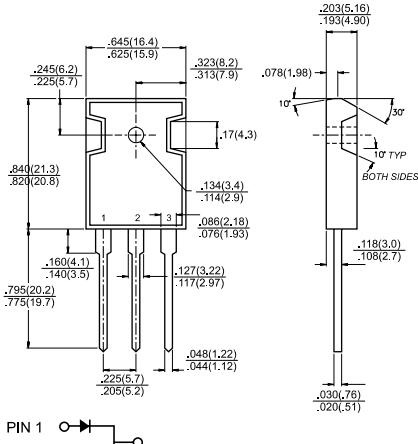
TO-3P/TO-247AD

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/10 seconds, 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



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 T _J	-65 to +125		-65 to +150			°C
Storage Temperature Range T _{STG}		-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

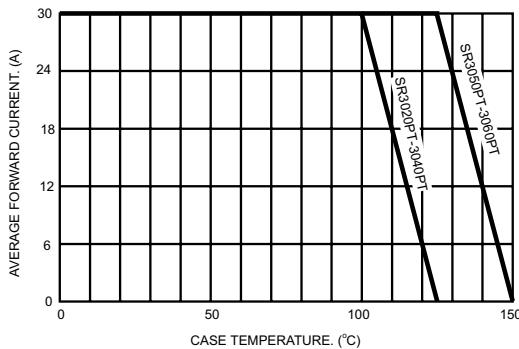


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

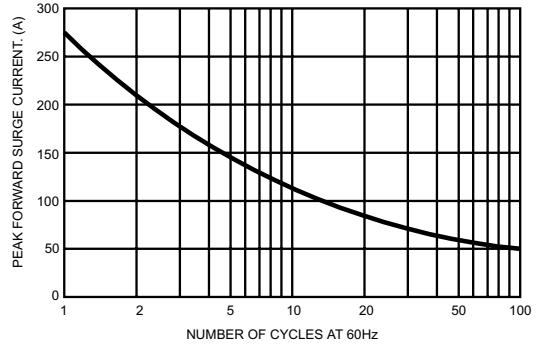


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

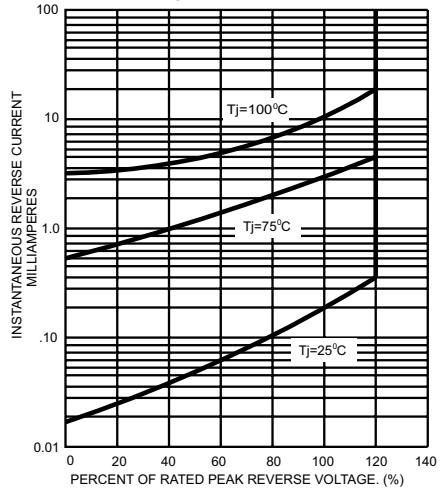


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER LEG

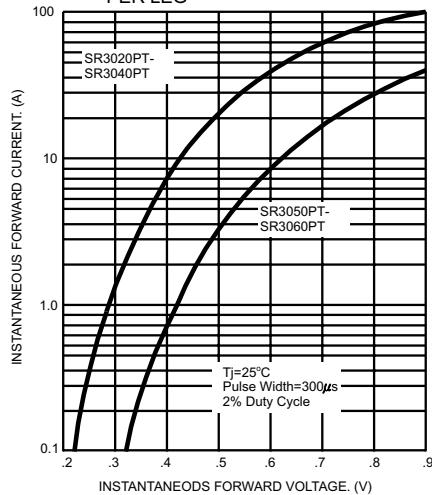


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

