SR3020PT THRU SR3060PT

30.0 AMPS. SCHOTTKY BARRIER RECTIFIERS

Voltage Range
20 to 60 Volts
Current
30.0 Amperes

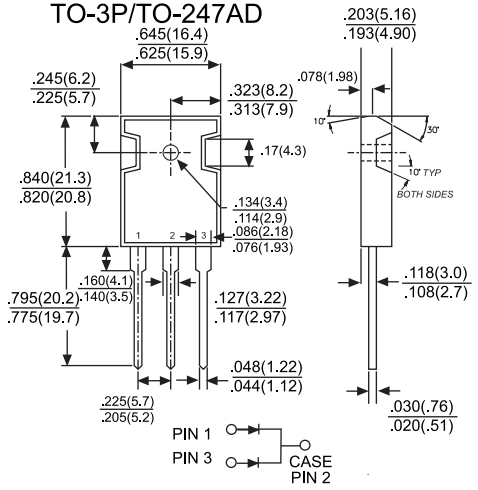
Features

- Dual rectifier construction,positive center-tap
- Plastic package has Underwriters Laboratory flammabilty 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^{0}C/10 seconds,0.17"(4.3mm) lead lengths at 5 lbs.,(2.3kg)

Mechanical Data

- Cases:JEDEC TO-3P/TO-247AD molded plastic
- Therminals:Leads solderable per MIL-STD-750,Method 2026
- 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, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number		SR3020PT	SR3030PT	SR3040PT	SR3050PT	SR3060PT	UNITS
Maximum Repetitive 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 Tc=100^{0}C	$I_{F(AV)}$	30					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	275					A
Maximum Instantaneous Forward Voltage @15.0A (Note 3)	V_F	0.55			0.70		V
Maximun DC Reverse Current @ T_A = 25°C at Rated DC Blocking Voltage @ T_A = 100°C	I_R	1.0 75					mA mA
Typical Thermal Resistance(Note 1)	$R_{\theta JC}$	1.5					°C/W
Typical Junction Capacitance (Note 2)	C_J	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 4.0 V D.C.
3.300 us Pulse Width,2% Duty Cycle

RATING AND CHARACTERISTIC CURVES
SR3020PT THRU SR3060PT

FIG.1- FORWARD CURRENT DERATING CURVE

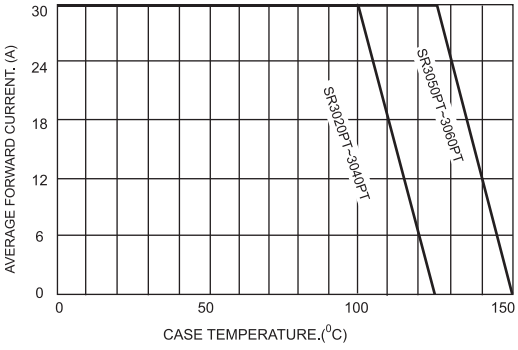


FIG.2- MAXIMUM NON-REPETITIVE
FORWARD SURGE CURRENT PER LEG

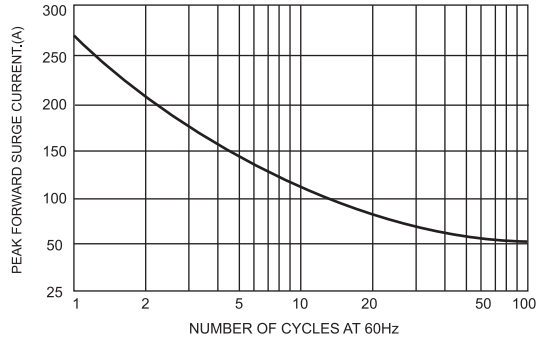


FIG.3-TYPICAL REVERSE CHARACTERISTICS
PER LEG

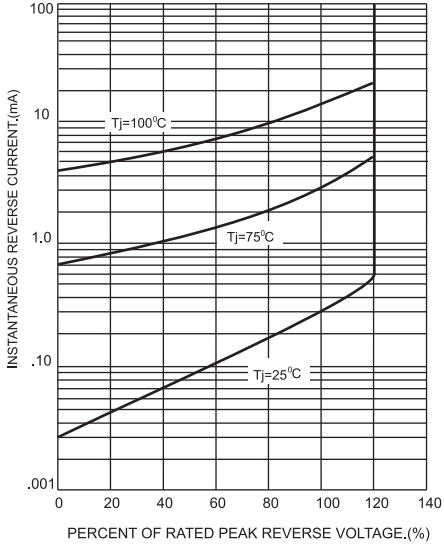


FIG.4-TYPICAL FORWARD CHARACTERISTICS
PER LEG

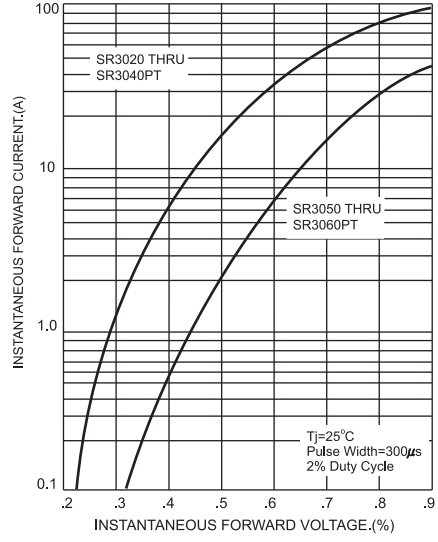


FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG