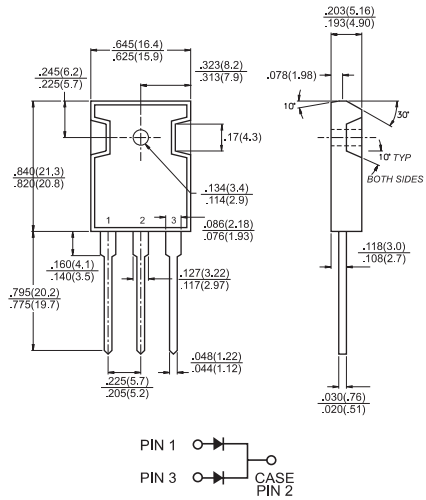
SR1620PT THRU SR1660PT

16.0 AMPS. Schottky Barrier Rectifiers



Voltage Range
20 to 60 Volts
Current
16.0 Amperes

TO-3P/TO-247AD



Dimensions in inches and (millimeters)

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/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

Maximum Ratings and Electrical Characteristics

Rating at 25℃ 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 1620PT	SR 1630PT	SR 1640PT	SR 1650PT	SR 1660PT	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 (See Fig. 1)	$I_{(AV)}$	16					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	200					A
Maximum Instantaneous Forward Voltage @ 8.0A (Note 3)	V_F	0.55			0.70		V
Maximum D.C. Reverse Current @ Tc=25℃ at Rated DC Blocking Voltage @ Tc=100℃	I_R	0.5 50					mA mA
Typical Thermal Resistance Per Leg (Note 1)	$R\theta_{JC}$	3.0					℃/W
Typical Junction Capacitance (Note 2)	Cj	700			400		pF
Operating Junction Temperature Range	T_J	-65 to +125			-65 to +150		℃
Storage Temperature Range	T_{STG}	-65 to +150					℃

Notes: 1. Thermal Resistance from Junction to Case Per Leg, Mount on Heatsink Size of 2 in x 3 in x 0.25 in 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 (SR1620PT THRU SR1660PT)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

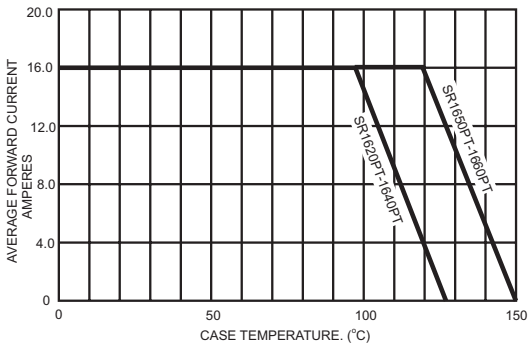


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

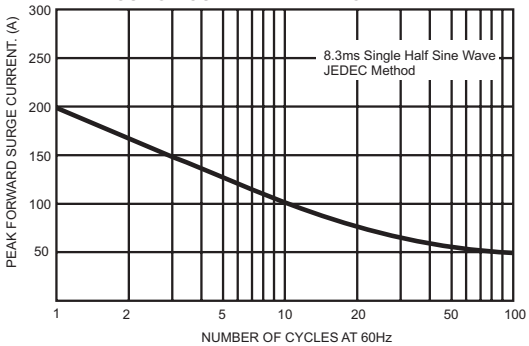


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

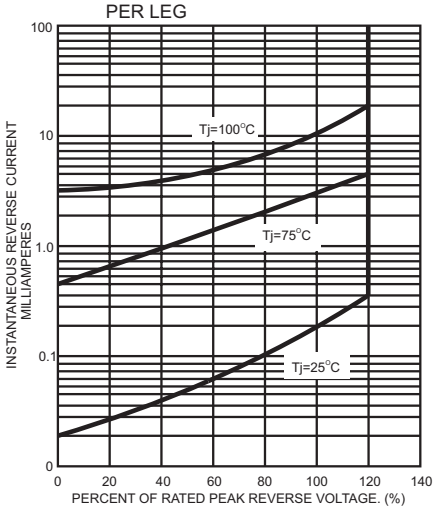


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

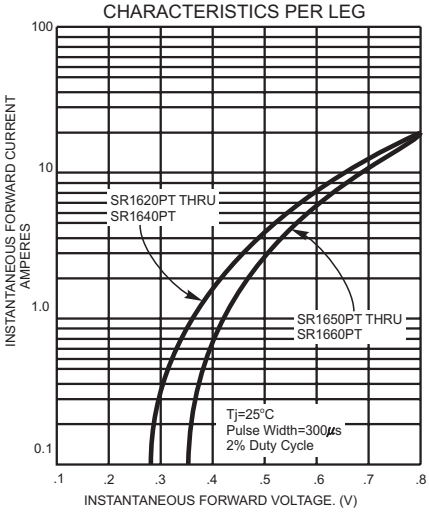


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

