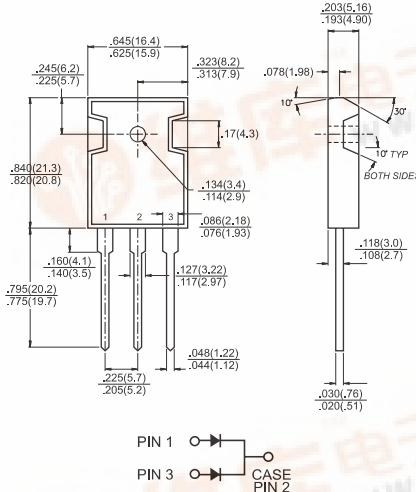


TSC 	SR1620PT THRU SR1660PT 16.0 AMPS. Schottky Barrier Rectifiers																																																																																																
	Voltage Range 20 to 60 Volts Current 16.0 Amperes																																																																																																
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/10 seconds, 0.17"(4.3mm)lead lengths at 5 lbs., (2.3kg) tension	TO-3P/TO-247AD  Dimensions in inches and (millimeters)																																																																																																
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°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20% <table><tr><th>Type Number</th><th>Symbol</th><th>SR 1620PT</th><th>SR 1630PT</th><th>SR 1640PT</th><th>SR 1650PT</th><th>SR 1660PT</th><th>Units</th></tr><tr><td>Maximum Recurrent Peak Reverse Voltage</td><td>V_{RRM}</td><td>20</td><td>30</td><td>40</td><td>50</td><td>60</td><td>V</td></tr><tr><td>Maximum RMS Voltage</td><td>V_{RMS}</td><td>14</td><td>21</td><td>28</td><td>35</td><td>42</td><td>V</td></tr><tr><td>Maximum DC Blocking Voltage</td><td>V_{DC}</td><td>20</td><td>30</td><td>40</td><td>50</td><td>60</td><td>V</td></tr><tr><td>Maximum Average Forward Rectified Current (See Fig. 1)</td><td>$I_{(AV)}$</td><td colspan="5">16</td><td>A</td></tr><tr><td>Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)</td><td>I_{FSM}</td><td colspan="5">200</td><td>A</td></tr><tr><td>Maximum Instantaneous Forward Voltage @ 8.0A (Note 3)</td><td>V_F</td><td colspan="3">0.55</td><td colspan="2">0.70</td><td>V</td></tr><tr><td>Maximum D.C. Reverse Current @ $T_c=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_c=100^{\circ}\text{C}$</td><td>I_R</td><td colspan="5">0.5 50</td><td>mA mA</td></tr><tr><td>Typical Thermal Resistance Per Leg (Note 1)</td><td>$R_{\theta JC}$</td><td colspan="5">3.0</td><td>$^{\circ}\text{C/W}$</td></tr><tr><td>Typical Junction Capacitance (Note 2)</td><td>C_j</td><td colspan="3">700</td><td colspan="2">400</td><td>pF</td></tr><tr><td>Operating Junction Temperature Range</td><td>T_J</td><td colspan="3">-65 to +125</td><td colspan="2">-65 to +150</td><td>$^{\circ}\text{C}$</td></tr><tr><td>Storage Temperature Range</td><td>T_{STG}</td><td colspan="5">-65 to +150</td><td>$^{\circ}\text{C}$</td></tr></table>		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 @ $T_c=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_c=100^{\circ}\text{C}$	I_R	0.5 50					mA mA	Typical Thermal Resistance Per Leg (Note 1)	$R_{\theta JC}$	3.0					$^{\circ}\text{C/W}$	Typical Junction Capacitance (Note 2)	C_j	700			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					$^{\circ}\text{C}$
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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

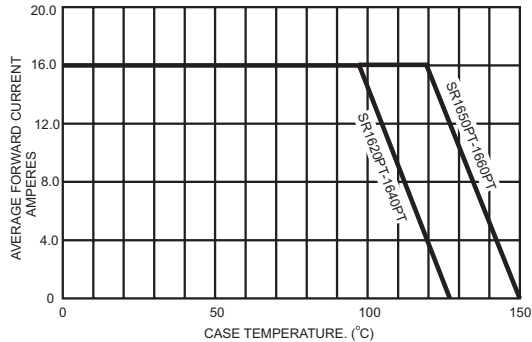


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

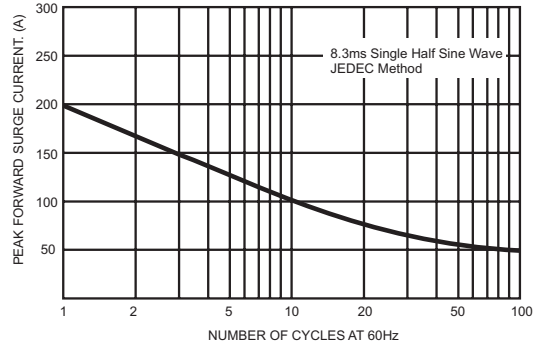


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER LEG

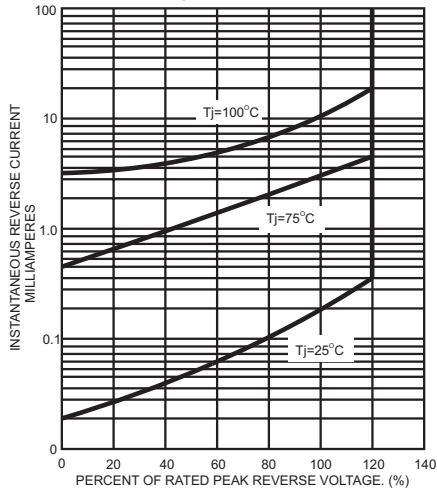


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

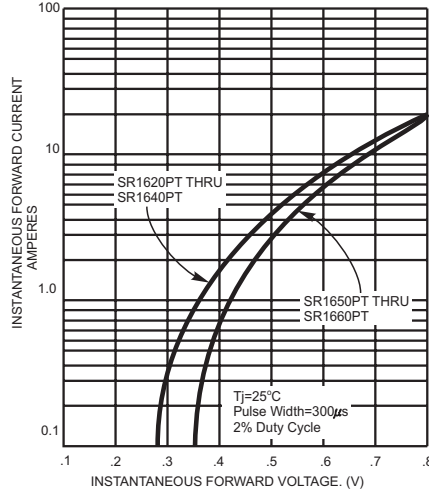


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

