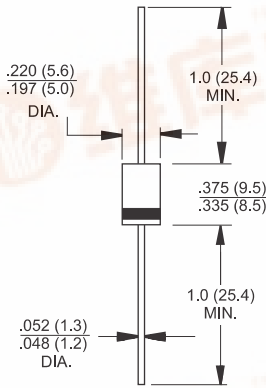


	SR802 THRU SR810 8.0 AMPS. Schottky Barrier Rectifiers																																																																																																																																	
					Voltage Range 20 to 100 Volts Current 8.0 Amperes																																																																																																																													
Features ✧ Low forward voltage drop ✧ High current capability ✧ High reliability ✧ High surge current capability					DO-201AD  Dimensions in inches and (millimeters)																																																																																																																													
Mechanical Data ✧ Cases: DO-201AD molded plastic ✧ Epoxy: UL 94V-O rate flame retardant ✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed ✧ Polarity: Color band denotes cathode end ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension ✧ Weight: 1.1 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 802</th><th>SR 803</th><th>SR 804</th><th>SR 805</th><th>SR 806</th><th>SR 809</th><th>SR 810</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>90</td><td>100</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>63</td><td>70</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>90</td><td>100</td><td>V</td></tr><tr><td>Maximum Average Forward Rectified Current See Fig. 1</td><td>$I_{(AV)}$</td><td colspan="7">8.0</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">175</td><td colspan="2">150</td><td>A</td></tr><tr><td>Maximum Instantaneous Forward Voltage @8.0A</td><td>V_F</td><td colspan="3">0.55</td><td colspan="2">0.70</td><td colspan="2">0.92</td><td>V</td></tr><tr><td>Maximum D.C. Reverse Current @ $T_A=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^{\circ}\text{C}$</td><td>I_R</td><td colspan="5">0.5 50</td><td colspan="2">0.1 —</td><td> mA mA </td></tr><tr><td>Typical Thermal Resistance (Note 1)</td><td>$R_{\theta JA}$</td><td colspan="7">40</td><td> °C/W </td></tr><tr><td>Typical Junction Capacitance (Note 2)</td><td>C_j</td><td colspan="3">500</td><td colspan="2">270</td><td colspan="2">165</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="4">-65 to +150</td><td> °C </td></tr><tr><td>Storage Temperature Range</td><td>T_{STG}</td><td colspan="7">-65 to +150</td><td> °C </td></tr></table>											Type Number	Symbol	SR 802	SR 803	SR 804	SR 805	SR 806	SR 809	SR 810	Units	Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	V	Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	V	Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	V	Maximum Average Forward Rectified Current See Fig. 1	$I_{(AV)}$	8.0							A	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	175					150		A	Maximum Instantaneous Forward Voltage @8.0A	V_F	0.55			0.70		0.92		V	Maximum D.C. Reverse Current @ $T_A=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^{\circ}\text{C}$	I_R	0.5 50					0.1 —		mA mA	Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	40							°C/W	Typical Junction Capacitance (Note 2)	C_j	500			270		165		pF	Operating Junction Temperature Range	T_J	-65 to +125			-65 to +150				°C	Storage Temperature Range	T_{STG}	-65 to +150							°C
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Notes: 1. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.

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



RATINGS AND CHARACTERISTIC CURVES (SR802 THRU SR810)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

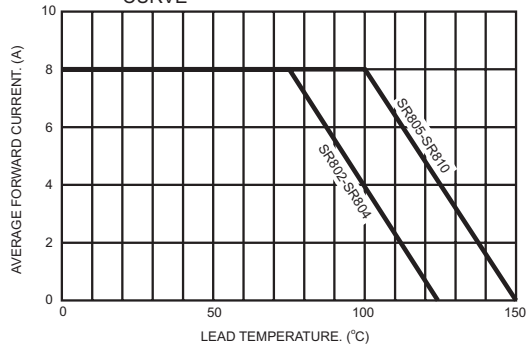


FIG.2- TYPICAL FORWARD CHARACTERISTICS

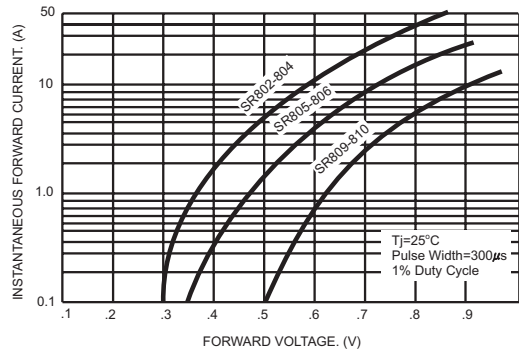


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

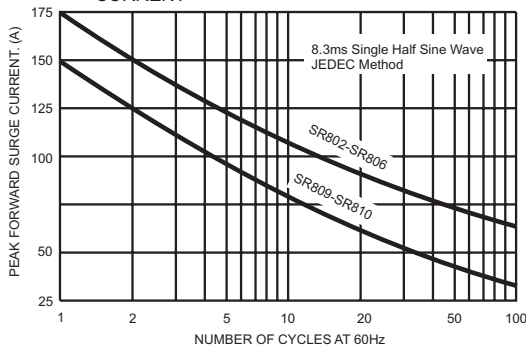


FIG.5- TYPICAL REVERSE CHARACTERISTICS

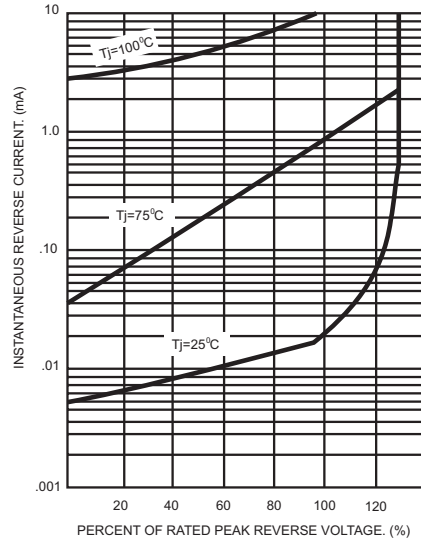


FIG.4- TYPICAL JUNCTION CAPACITANCE PER LEG

