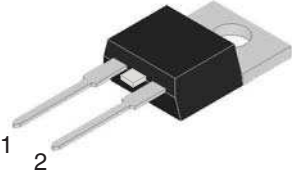



## 8.0 Amp. Schottky Barrier Rectifier

<p><b>TO-220AC</b></p>  <div style="text-align: center; margin-top: 20px;">  <p>Case Positive</p> </div>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><b>Voltage</b></td> <td style="text-align: center;"><b>Current</b></td> </tr> <tr> <td style="text-align: center;">20 to 150 V</td> <td style="text-align: center;">8.0 A</td> </tr> </table> <ul style="list-style-type: none"> <li>Low power loss, high efficiency.</li> <li>High current capability, Low VF.</li> <li>High reliability</li> <li>High surge current capability.</li> <li>Epitaxial construction.</li> <li>Guard-ring for transient protection.</li> <li>For use in low voltage, high frequency inverter, free wheeling, and polarity protection application</li> </ul> <p><b>Mechanical Data</b></p> <ul style="list-style-type: none"> <li>Cases: TO-220AB molded plastic</li> <li>Epoxy: UL 94V-0 rate flame retardant</li> <li>Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed</li> <li>Polarity: As marked</li> <li>High temperature soldering guaranteed: 260°C/10 seconds, 6.35mm from case</li> <li>Weight: 2.24 grams</li> </ul>	<b>Voltage</b>	<b>Current</b>	20 to 150 V	8.0 A
<b>Voltage</b>	<b>Current</b>				
20 to 150 V	8.0 A				

### Absolute Maximum Ratings, according to IEC publication No. 134

		SRA 820	SRA 840	SRA 860	SRA 8100	SRA 8150
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage (V)	20	40	60	100	150
V <sub>RMS</sub>	Maximum RMS Voltage (V)	14	28	42	70	105
V <sub>DC</sub>	Maximum DC blocking voltage (V)	20	40	60	100	150
I <sub>F(AV)</sub>	Maximum Average Forward Rectified Current See Fig.	8.0 A				
I <sub>FSM</sub>	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	150 A				
C <sub>j</sub>	Typical Junction Capacitance at 1MHz and Applied Reverse Voltage of 4.0V D.C.	400 pF		300 pF		250 pF
T <sub>j</sub>	Operating Junction Temperature Range	- 65 to + 125 °C			- 65 to + 150 °C	
T <sub>stg</sub>	Storage Temperature Range	- 65 to + 150 °C				

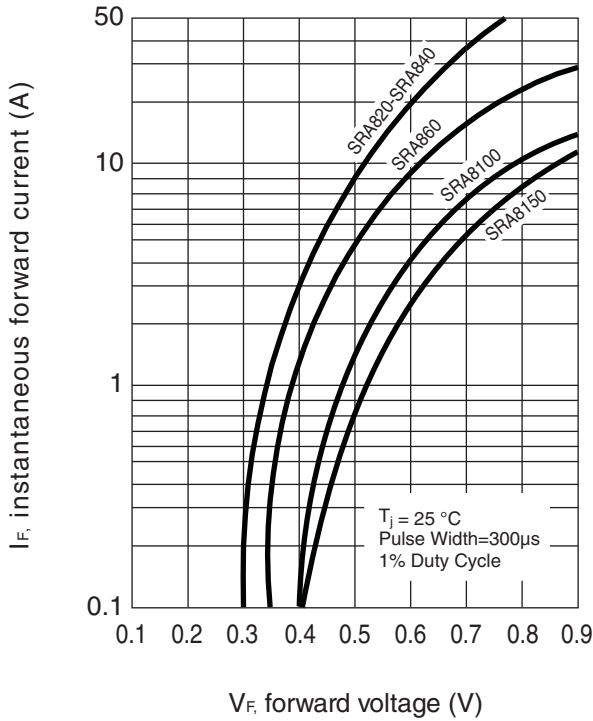
### Electrical Characteristics

		SRA 820	SRA 840	SRA 860	SRA 8100	SRA 8150
V <sub>F</sub>	Maximum Instantaneous Forward Voltage @ 8.0 A	0.55 V		0.70 V	0.92 V	1.05 V
I <sub>R</sub>	Maximum D.C. Reverse Current @ T <sub>C</sub> =25°C at Rated DC Blocking Voltage @ T <sub>C</sub> =125°C	0.5 mA			0.1 mA	
		15 mA		10 mA	5 mA	
R <sub>thj-c</sub>	Typical Thermal Resistance (Note 1)	4.0 °C/W				

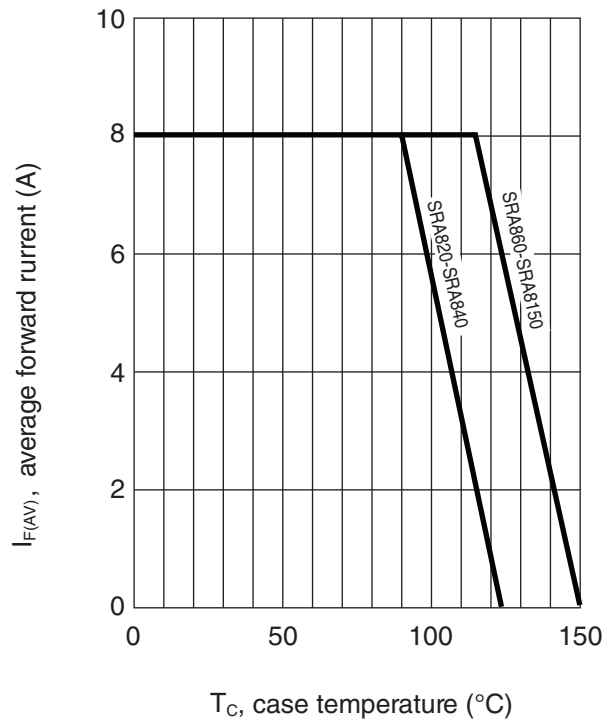
Notes: 1. Thermal Resistance from Junction to Case Per Leg WITH Heatsink of (50.4 mm x 76.2 mm x 6.35 mm) Al-Plate.

**Rating And Characteristic Curves**

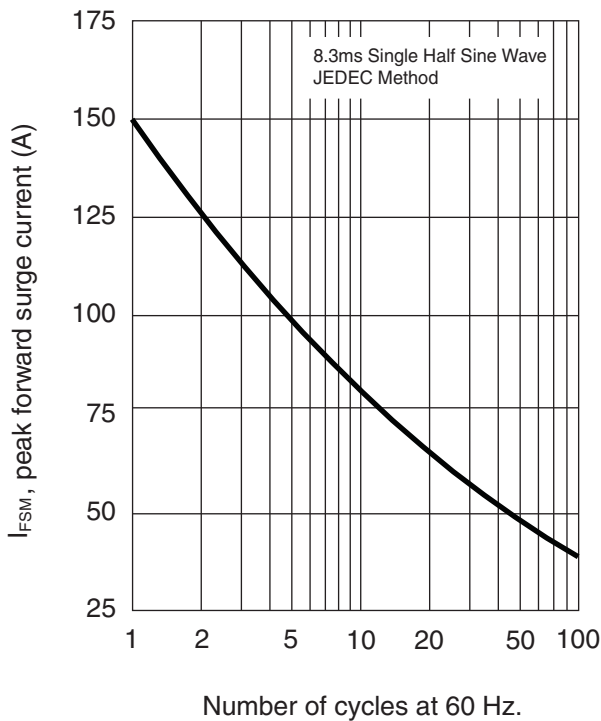
TYPICAL FORWARD CHARACTERISTICS



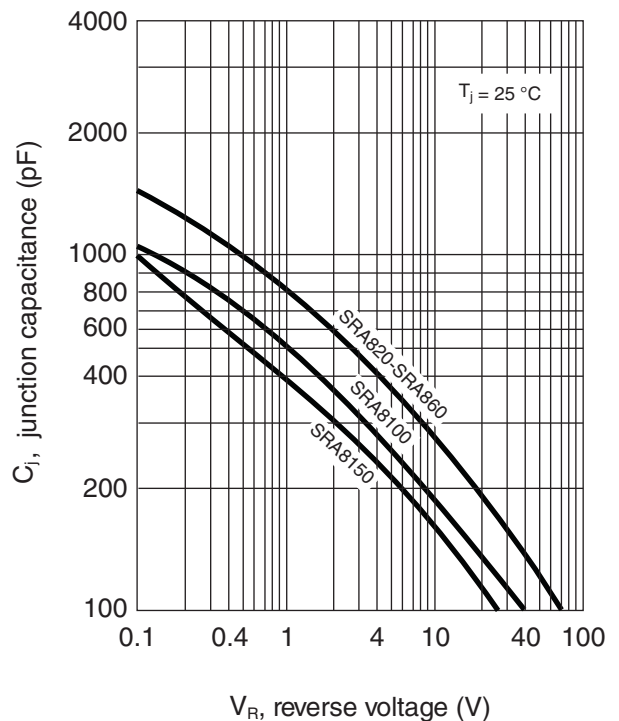
MAXIMUM FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

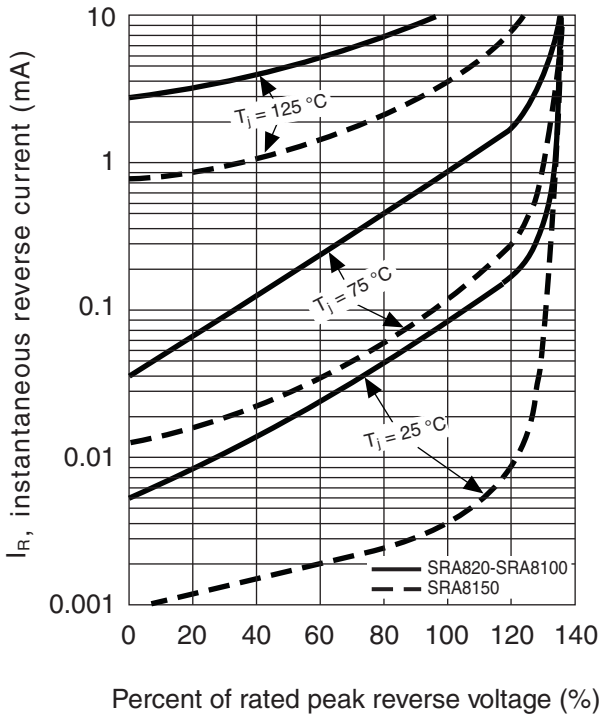


TYPICAL JUNCTION CAPACITANCE

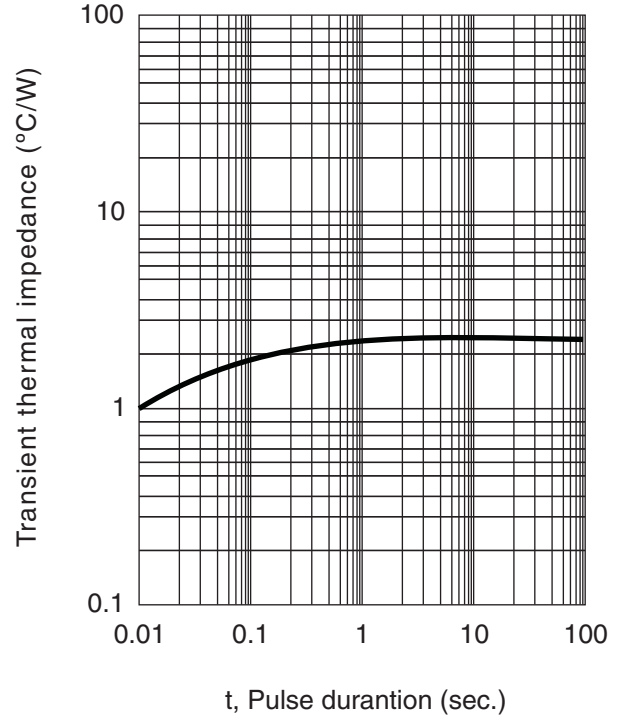


**Rating And Characteristic Curves**

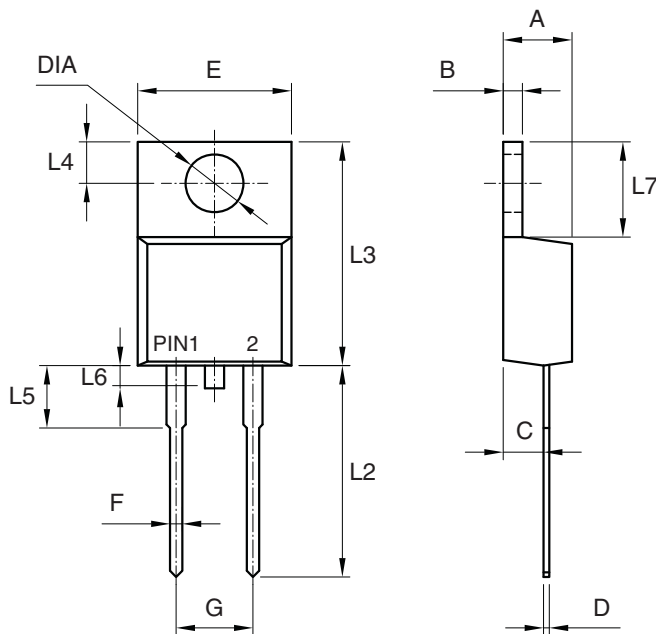
TYPICAL REVERSE CHARACTERISTICS



TYPICAL TRANSIENT THERMAL CHARACTERISTICS



**PACKAGE MECHANICAL DATA TO-220AC**



REF.	DIMENSIONS	
	Millimeters	
	Min.	Max.
A	4.44	4.70
B	1.14	1.40
C	2.54	2.79
D	0.35	0.64
E	-	10.50
F	0.68	0.94
G	4.95	5.20
L2	13.46	14.22
L3	14.9	15.10
L4	2.62	2.87
L5	3.56	4.06
L6	-	1.60
L7	5.84	6.86
DIA	3.74	3.91