

## **SR 220U THRU SR 2250U**

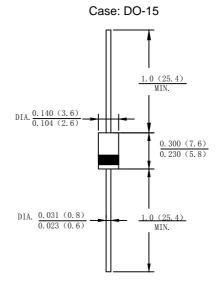
2.0 AMP. Schottky Barrier Rectifiers

### **Features**

- · Low forward voltage drop
- · High current capability
- · High reliability
- · High surge current capability
- · Plastic material-UL flammability 94V-0

#### **Mechanical Data**

- Case: Molded plastic DO-15
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- · Polarity: Color band dentes cathode end
- · Mounting Position: Any



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%

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Type Number	SYMBOL	SR 220U	SR 230U	SR 240U	SR 245U	SR 250U	SR 260U	SR 280U	SR 2100U	SR 2150L	SR J2200L	SR J2250L	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	45	50	60	80	100	150	200	250	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	26	31.5	35	42	56	70	105	140	175	V
Maximum DC Blocking Voltage	VDC	20	30	40	45	50	60	80	100	150	200	250	V
Average Rectified Output Current (Note 1) @TL=120°C	<b>I</b> F(AV)	2.0											А
Non-Repetitive Peak Forward Surge $@T_{j=25}$ $^{\circ}$ C Current 8.3ms Single half sine-wave $@T_{j=125}$ $^{\circ}$ C Superimposed On Rated Load (JEDEC Method)	Ігѕм	70 56											A
Non-Repetitive Peak Forward Surge @T <sub>j=25</sub> ℃ Current 1.0ms Single half sine-wave @T <sub>j=125</sub> ℃ Superimposed On Rated Load (JEDEC Method)	IFSM	140 112										А	
10000 times of the wave surge current (time width 1ms, time interval 3s)	IFSM	52.5											А
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	20.335										A <sup>2</sup> s	
Forward Voltage @IF=2.0A	VFM			0.50		0	.67	0	).82	0.	90	0.92	V
Peak Reverse Current @T <sub>A</sub> =25°C		0.1 0.05										- A	
At Rated DC Blocking Voltage @T <sub>A</sub> =100°C	⊢ I <sub>R</sub>	10.0					5.0					mA	
Typical Junction Capacitance	Сл	100						50				pF	
Typical Thermal Resistance Junction to Ambient(Note 2)	R өJA	75.0									°C/W		
Operating Temperature Range	Тл		-55 to + 150									$^{\circ}$	
Storage Temperature Range	Тѕтс	-55 to + 150										$^{\circ}$ C	

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case 2.P.C.B.mounted with 0.2×0.2" (5.0×5.0mm) copper pad areas

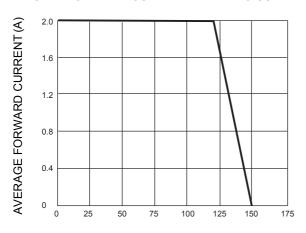
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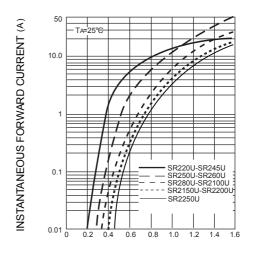
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FIG. 1 - FORWARD CURRENT DERATING CURVE



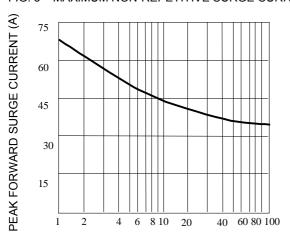
LEAD TEMPERATURE, ℃

FIG.2-TYPICAL FORWARD CHARACTERISTICS



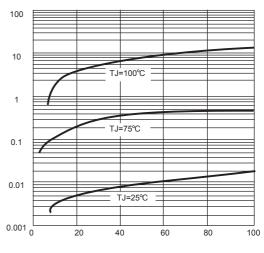
INSTANTANEOUS FORWARD ( V )

FIG. 3 - MAXIMUM NON-REPETITIVE SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

FIG. 4 - TYPICAL JUNCTION CAPACITANCE



INSTANTANEOUS REVERSE CURRENT (mA)

REVERSE VOLTAGE (%)

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