

# **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

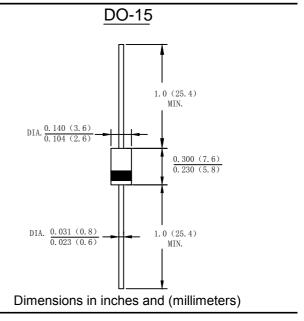
### **Mechanical Data**

· 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



### **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%

Type Number	SYMBOL	SR 220U	SR 230U	SR 240U	SR 245U	SR 250U	SR 260U	SR 280U	SR 2100U	SR 2150L	SR 2200L	SR J2250U	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	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	V <sub>DC</sub>	20	30	40	45	50	60	80	100	150	200	250	V
Average Rectified Output Current (Note 1) @T <sub>L</sub> =120°C	<b>I</b> F(AV)	2.0											Α
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	70										Α	
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t	20.335										A <sup>2</sup> s	
Forward Voltage @IF=2.0A	V <sub>FM</sub>		0.50			0	.67	С	.82	0.	90	0.92	V
Peak Reverse Current @T <sub>A</sub> =25°C			0.1 0.05										mA
At Rated DC Blocking Voltage @T <sub>A</sub> =100°C	- I <sub>R</sub>	10.0 5.0											
Typical Junction Capacitance	Сл	220					180						pF
Typical Thermal Resistance Junction to Ambient(Note 2)	R өJA	75.0											°C/W
Operating Temperature Range	TJ		-55 to + 150										
Storage Temperature Range	Тѕтс	-55 to + 150											$^{\circ}$ C

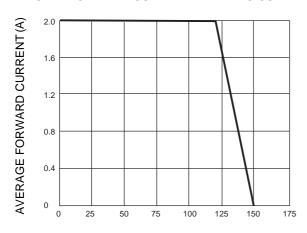
Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2.P.C.B.mounted with 0.2×0.2" (5.0×5.0mm) copper pad areas



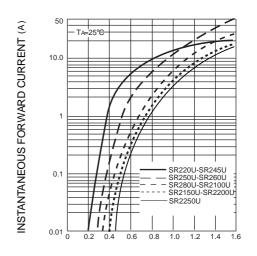
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FIG. 1 - FORWARD CURRENT DERATING CURVE



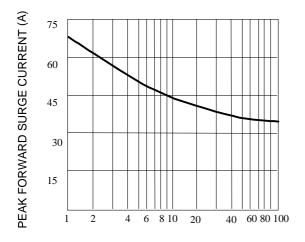
LEAD TEMPERATURE, ℃

FIG.2-TYPICAL FORWARD CHARACTERISTICS



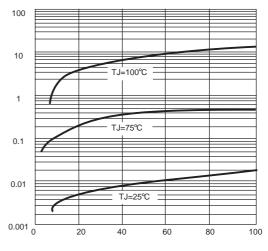
INSTANTANEOUS FORWARD ( V )

FIG. 3 - MAXIMUM NON-REPETITIVE SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

FIG. 4 - TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE (%)

INSTANTANEOUS REVERSE CURRENT (mA)

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