

II. Schottky Rectifier

2.0A Schottky Rectifier SR220~SR2200

(Package: DO-15)

<p>FEATURES</p> <ul style="list-style-type: none"> • The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 • Metal silicon junction, majority carrier conduction • Low power loss, high efficiency • High forward surge current capability • High temperature soldering guaranteed <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case : JEDEC DO-15 molded plastic body • Terminals : Plated axial leads, solderable per MIL-STD-202E, Method 208C guaranteed • Polarity : Color band denotes cathode end • Mounting Position : Any • Weight : 0.35 grams 	<p>Case: DO-15 Dimensions in inches and (millimeters)</p>
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Ratings & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	SR 220	SR 230	SR 240	SR 250	SR 260	SR 280	SR 2100	SR 2150	SR 2200	Units
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current at derating lead temperature	I_O	2.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60									Amps
Maximum instantaneous forward voltage at 2.0A DC	V_F	0.55		0.70		0.85				Volts	
Maximum average reverse current at rated DC blocking voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	I_R	0.2									mA
		2									
Typical thermal resistance (Note 1)	Rth-JA	45									°C/W
	Rth-JL	15									
Typical junction capacitance (Note 2)	C_j	180									PF
Operating junction temperature range	T_j	-55 to +125			-55 to +150						°C
Storage temperature range	T_{stg}	-55 to +150									°C

Notes:

1. Thermal resistance : At 9.5mm lead lengths, PCB mounted.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

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Ratings and Characteristic Curves of SR220~SR2200

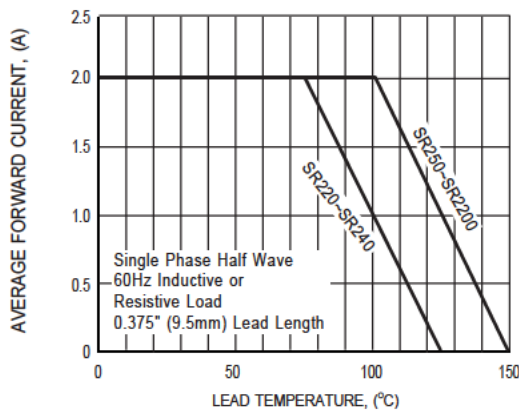


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

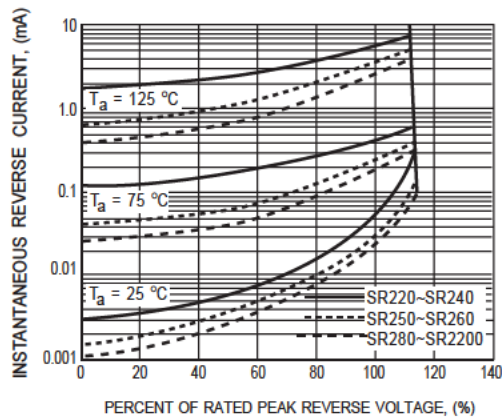


FIG.2 TYPICAL REVERSE CHARACTERISTICS

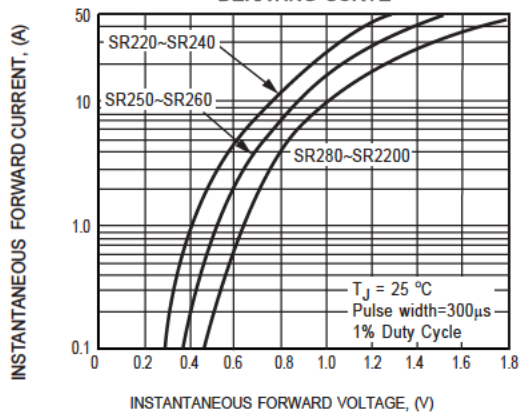


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

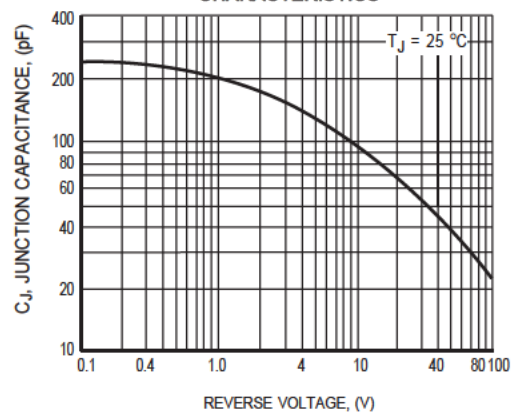


FIG.4 TYPICAL JUNCTION CAPACITANCE

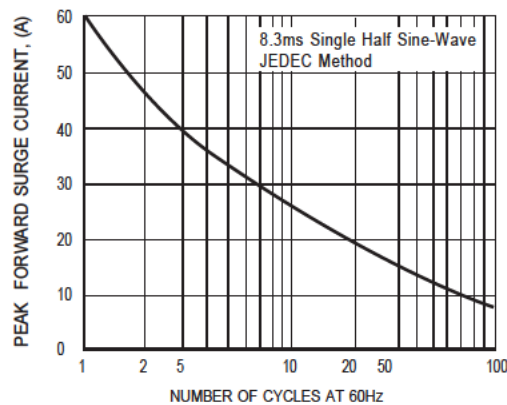


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT