

II. Schottky Rectifier

1.0A Schottky Rectifier SR120~SR1200

(Package: DO-41)

<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: 250 /10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case : JEDEC DO-41 molded plastic body • Terminals : Plated axial leads, solderable per MIL-STD-750, Method 2026 • Polarity : Color band denotes cathode end • Mounting Position : Any • Weight : 0.33 grams, 0.012 ounce 	<p>Case: DO-41 Dimensions in inches and (millimeters)</p>
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Ratings & Electrical Characteristics

Ratings at 25 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 120	SR 130	SR 140	SR 150	SR 160	SR 180	SR 1100	SR 1150	SR 1200	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	1.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30									Amps
Maximum instantaneous forward voltage at 1.0A DC	V_F	0.55		0.70		0.85		0.95		Volts	
Maximum average reverse current $T_a = 25^\circ C$ at rated DC blocking voltage $T_a = 100^\circ C$	I_R	0.2									mA
		2									
Typical thermal resistance (Note 1)	Rth-JA	50									$^\circ C/W$
	Rth-JL	15									
Typical junction capacitance (Note 2)	C_j	110			80						PF
Operating junction temperature range	T_j	-55 to +125			-55 to +150						$^\circ C$
Storage temperature range	T_{stg}	-55 to +150									$^\circ C$

Notes :

1. Thermal resistance : At 9.5mm lead lengths, PCB mounted.

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

Ratings and Characteristic Curves of SR120~SR1200

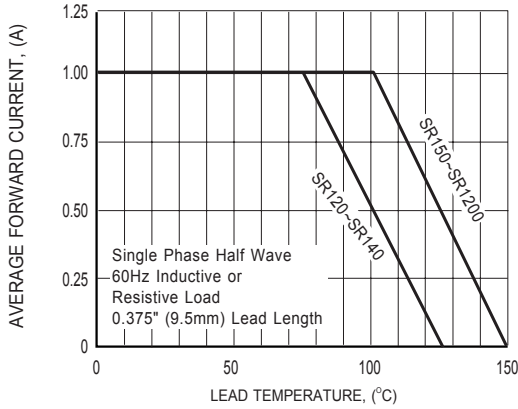


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

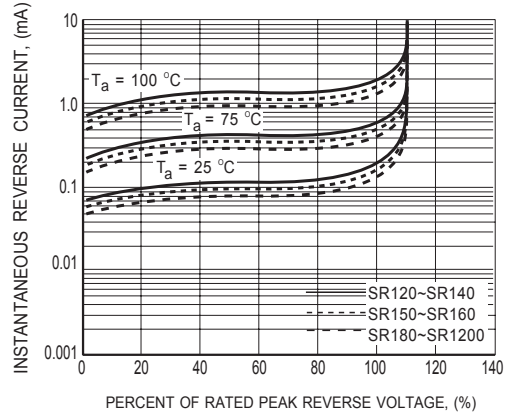


FIG.2 TYPICAL REVERSE CHARACTERISTICS

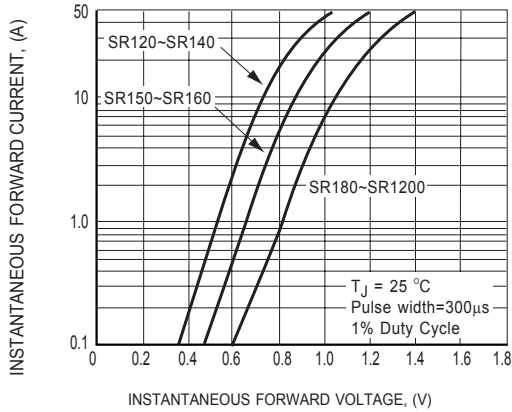


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

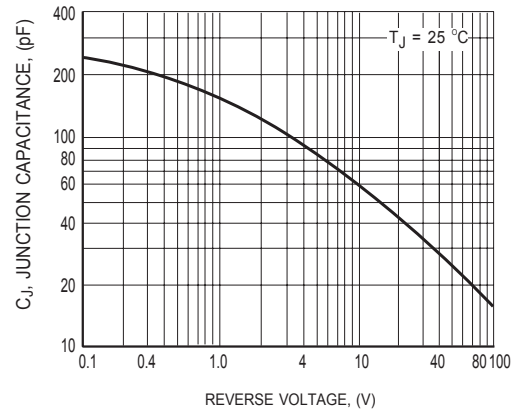


FIG.4 TYPICAL JUNCTION CAPACITANCE

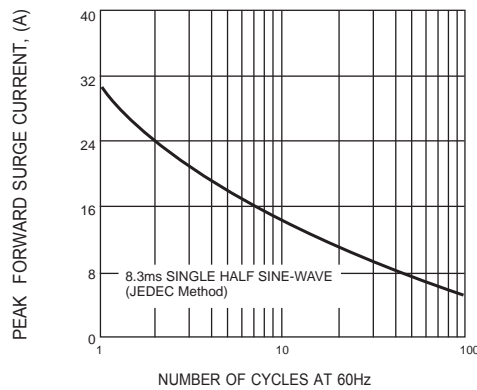


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT