



SCHOTTKY BARRIER RECTIFIER

SR120 - SR1100

VOLTAGE RANGE
CURRENT

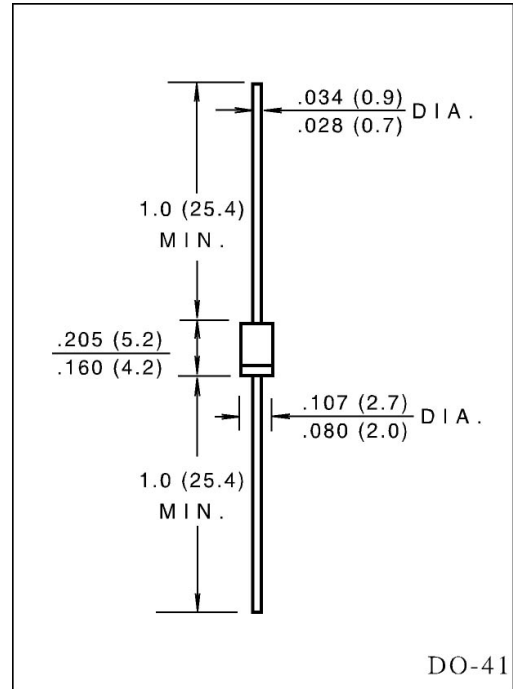
20 to 100Volts
1.0 Ampere

FEATURES

- Fast switching.
- Low forward voltage, high current capability.
- Low power loss, high efficiency.
- High current surge capability.
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length
at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V - 0 rate flame retardant.
- Polarity: Color band denoted cathode end.
- Lead: Plastic axial lead, solderable per MIL - STD - 202E
method 208C
- Mounting position : Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%

	SYMBOLS	SR120	SR130	SR140	SR150	SR160	SR180	SR1100	UNIT	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	Volts	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	57	70	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	Volts	
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at	$T_L = 75^\circ\text{C}$ (SR102-104) $T_L = 100^\circ\text{C}$ (SR105-108)	$I_{(AV)}$							1.0	Amp
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	40							Amps	
Maximum Instantaneous Forward Voltage at 1.0A	V_F	0.55			0.75		0.85		Volts	
Maximum DC Reverse Current at rate DC blocking voltage (Note 1)	$T_A = 25^\circ\text{C}$	0.5							mA	
	$T_A = 100^\circ\text{C}$	10								
Typical Junction Capacitance (Note 2)	C_j	110							pF	
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	50							°C/W	
Operating Temperature Range	T_J	(-65 to +125)			(-65 to +150)				°C	
Storage Temperature Range	T_{STG}	(-65 to +150)							°C	

NOTES:

1. Pulse test: 300 μ s pulse width, 1% duty cycle.
2. Measured at 1MHz and applied reverse voltage of 4.0 volts.
3. Thermal resistance from junction to ambient P.C.B. mounted with 0.375" (9.5mm) lead length with 1.5" x 1.5" (38 X 38mm) copper pads.



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RATINGS AND CHARACTERISTIC CURVES SR120 - SR1100

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

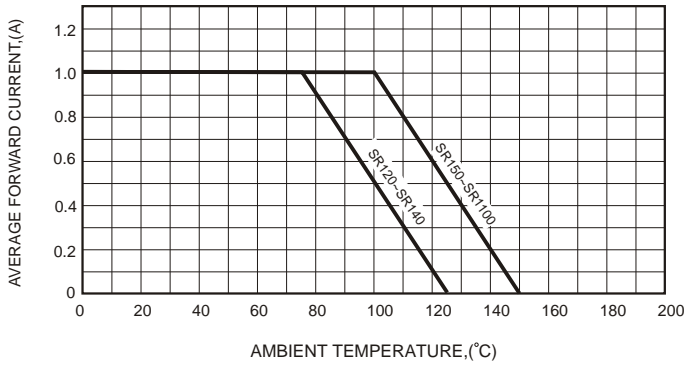


FIG.2-TYPICAL FORWARD CHARACTERISTICS

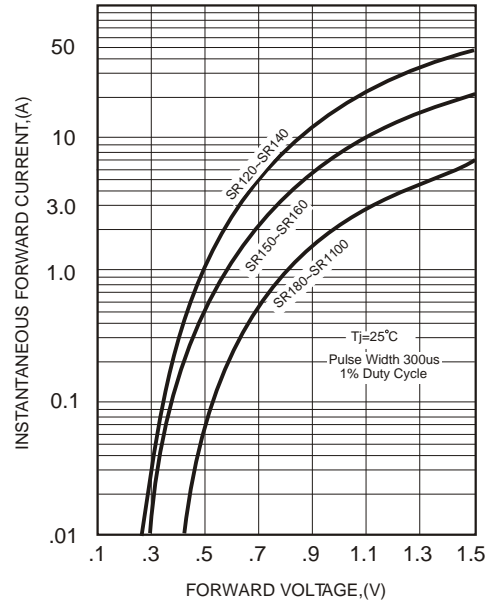


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

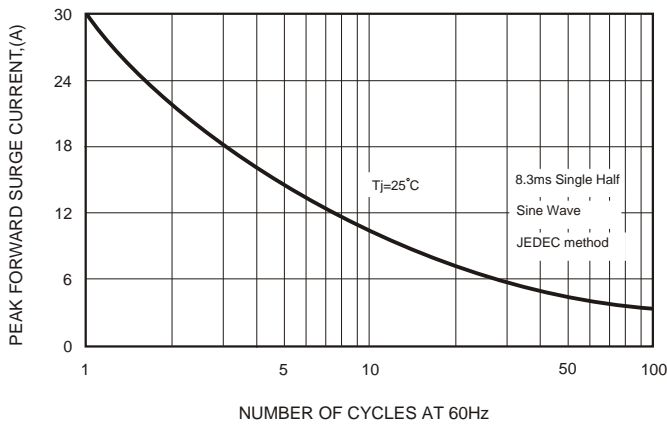


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

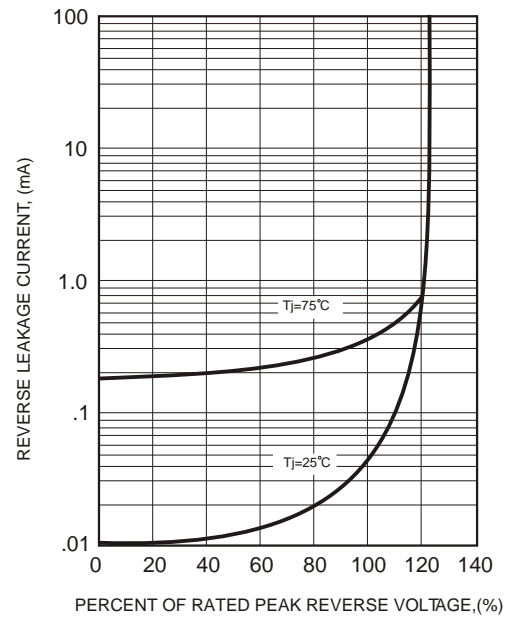


FIG.4-TYPICAL JUNCTION CAPACITANCE

