



HFZT

SCHOTTKY BARRIER RECTIFIER

SR120 --- SR1200

VOLTAGE RANGE: 20--- 200 V CURRENT: 1.0 A

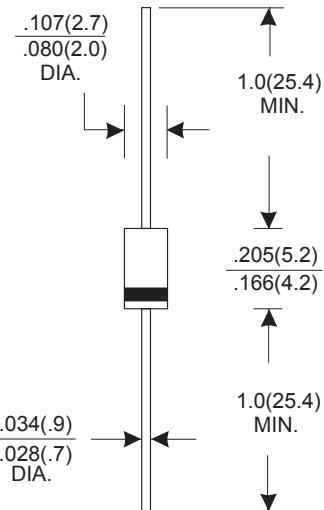
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: DO-41 molded plastic body
- Terminals: Lead solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

TYPE NUMBER	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	V						
Maximum RMS voltage	V_{RMS}	14	21	28	42	56	63	71	105	140	V						
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V						
Maximum Average Forward rectified Current 0.375" (9.5mm) lead length	$I_{F(AV)}$	1.0									A						
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	40.0									A						
Maximum instantaneous forward voltage at 1.0 A (Note 1)	V_F	0.55		0.70		0.85					V						
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage per diode	I_R	0.2				0.1				mA							
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50.0									°C/W						
Typical junction capacitance (Note 3)	C_j	110									pF						
Storage Temperature	T_{STG}	- 55 ---- + 150									°C						
Operation Junction Temperature	T_j	- 55 ---- + 120									°C						

NOTE: 1. Pulse test: 300μs pulse width, 1% duty cycle.

2. Thermal resistance from junction to case.



RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

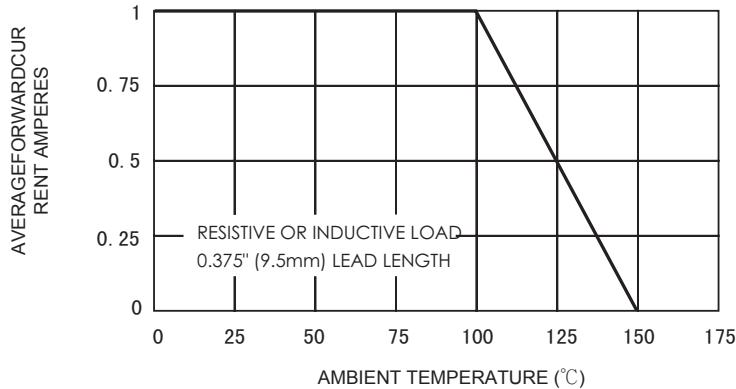


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

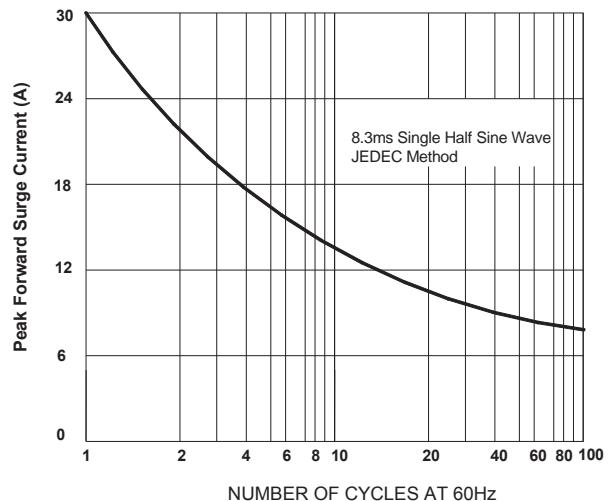


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

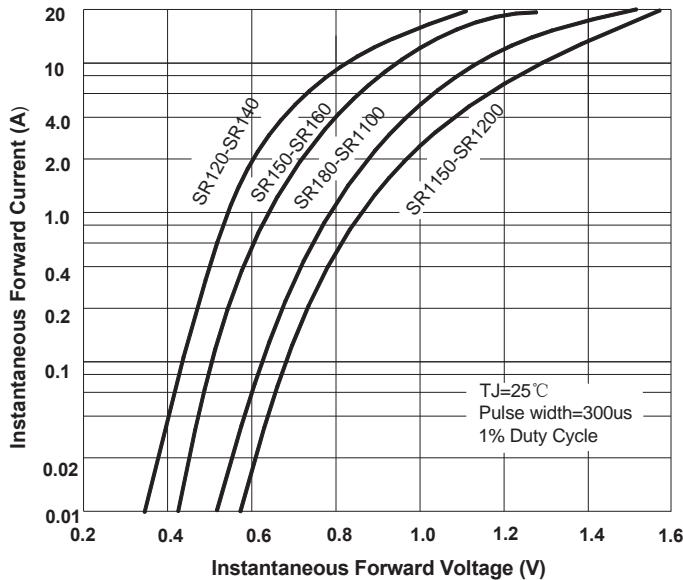


FIG.4-TYPICAL REVERSE CHARACTERISTICS

