



SR120 THRU SR1200

SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: 20 to 200 VOLTS

FORWARD CURRENT: 1.0 AMPERE

FEATURES

- High current capability
- High surge current capability
- Low forward voltage drop
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- Suffix "H" indicates Halogen-free parts, ex. SR120H.

MECHANICAL DATA

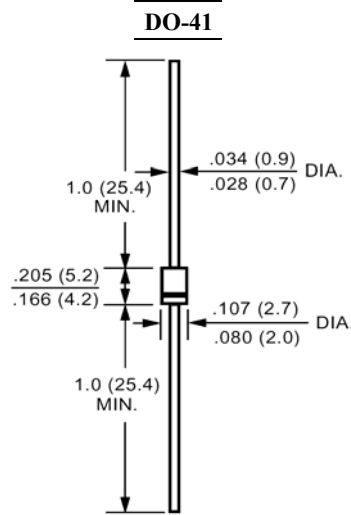
Case: Molded plastic, DO-41

Epoxy : UL 94V-O rate flame retardant

Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed

Polarity : Color band denotes cathode end

Mounting position : Any



Dimensions in inches and (millimeters)

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%.

Parameter	Symbols	SR120	SR130	SR140	SR150	SR160	SR180	SR1100	SR1150	SR1200	Units
Maximum Recerrent 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 .375"(9.5mm) Lead Length	$I_{(AV)}$	1.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0									Amp
Maximum Forward Voltage at 1.0A DC and 25°C	V_F	0.55		0.70		0.85		0.95			Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.5									mAmp
		10			5.0						
Typical Junction Capacitance (Note 1)	C_J	110									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50.0									°C/W
Operating and Storage Temperature Range	T_J, T_{stg}	-65 to +125				-65 to +150					°C

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted with 0.22x0.22" (5.5x5.5mm) copper pads



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RATINGS AND CHARACTERISTIC CURVES

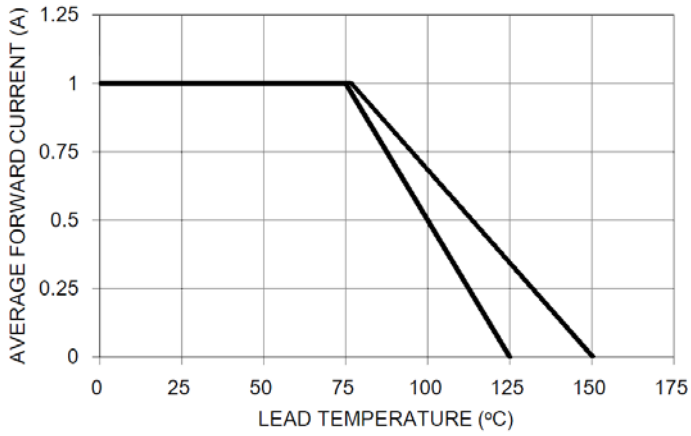


FIG. 1- FORWARD CURRENT DERATING CURVE

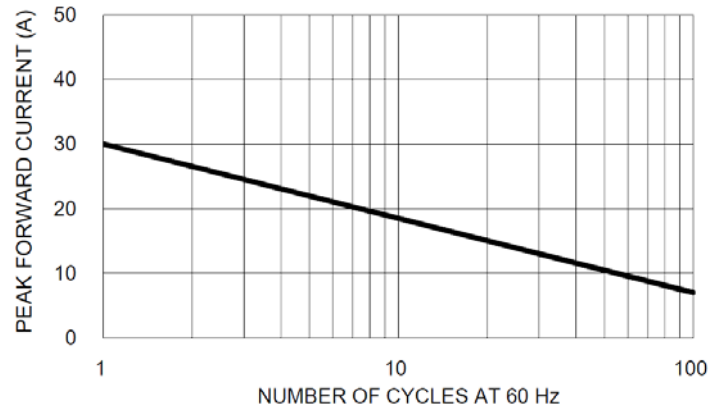


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

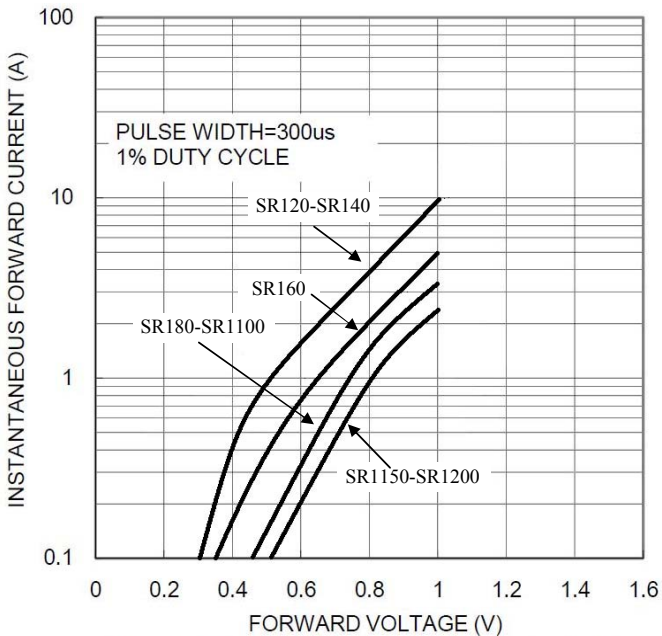


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

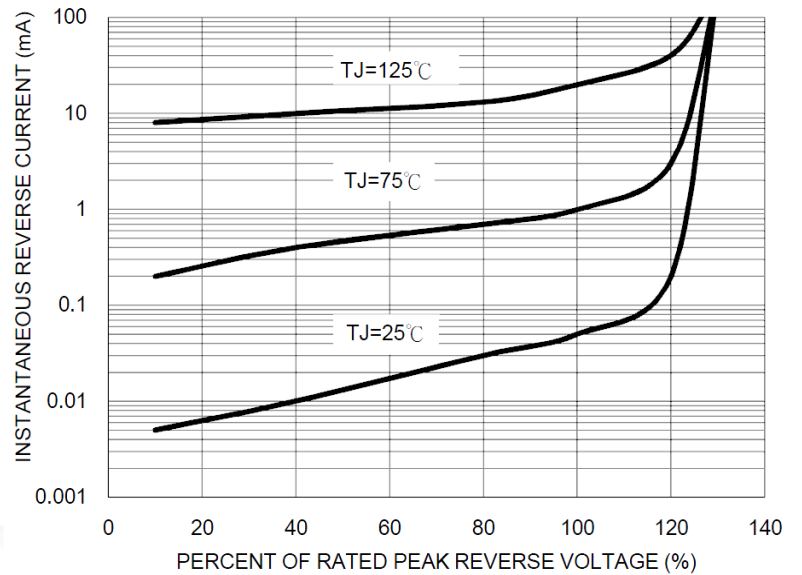


FIG. 4 TYPICAL REVERSE CHARACTERISTICS