SR120 THRU SR1200

SCHOTTKY BARRIER RECTIFIER

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HORNBY ELECTRONIC

REVERSE VOLTAGE: **20 to 200 VOLTS**

FORWARD CURRENT: **1.0 AMPERE**

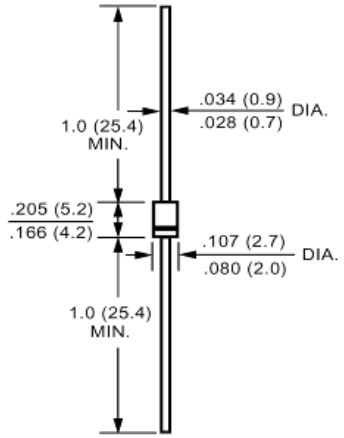
FEATURES

· 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 porlarlity protection applications

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
Weight: 0.012ounce, 0.33gram

DO-41



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

	Symbols	*SR120*	*SR130*	*SR140*	*SR150*	*SR160*	*SR180*	*SR1100*	*SR1150*	*SR1200*	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 .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									**Amp**
Maximum Forward Voltage at 1.0A DC and 25℃	V_F	0.55			0.70		0.85		0.95		**Volts**
Maximum Reverse Current at T_A=25℃	I_R	0.5									**mAmp**
at Rated DC Blocking Voltage T_A=100℃		10									
Typical Junction Capacitance (Note 1)	C_J	110									**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50									**℃/W**
Operating Junction Temperature Range	T_J	-55 to +125			-55 to +150						**℃**
Storage Temperature Range	Tstg	-55 to +150									**℃**

NOTES:

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

2- Thermal Resistance From Junction to Ambient 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

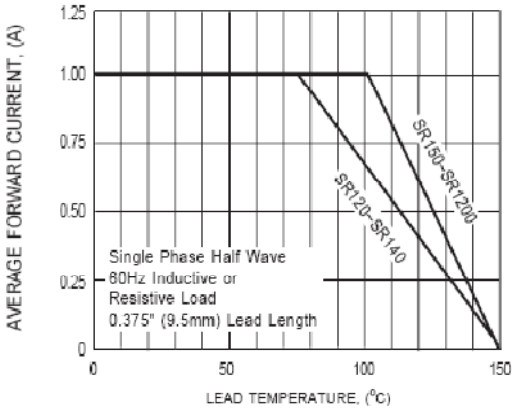

FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

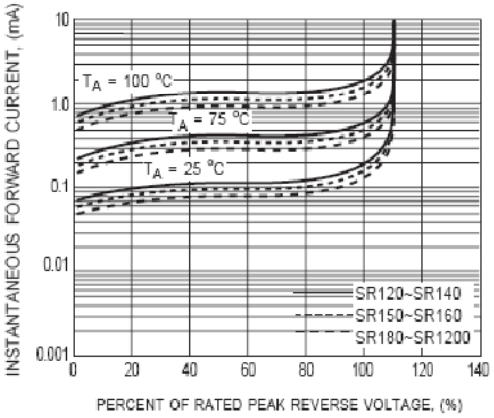

FIG.2 TYPICAL REVERSE CHARACTERISTICS

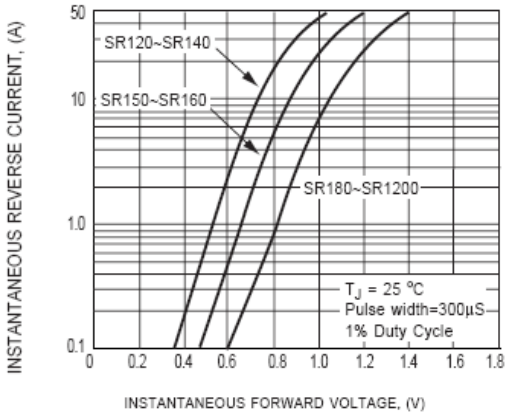

FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

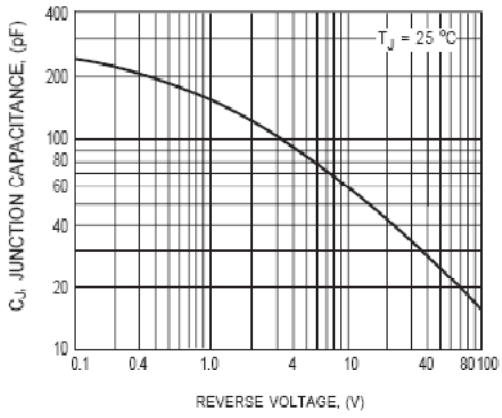

FIG.4 TYPICAL JUNCTION CAPACITANCE

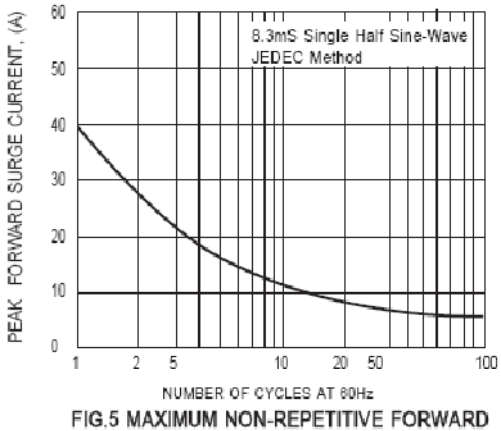

FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT