

SR120 THRU SR1100

SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: FORWARD CURRENT:

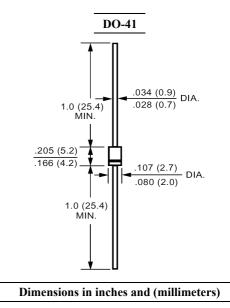
20 to 100 VOLTS 1.0 AMPERE



- · 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



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	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	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				85	Volts		
Maximum Reverse Currentat $T_A=25$ at Rated DC Blocking Voltage $T_A=100$	I _R	0.5 10							mAmp
Typical Junction Capacitance (Note 1)	CJ	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							

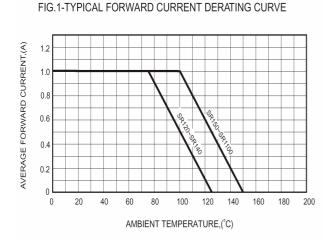
NOTES:

1- Measured at 1 $\ensuremath{\text{MH}_{Z}}$ 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



RATINGS AND CHARACTERISTIC CURVES



SURGE CURRENT 30 PEAK FORWARD SURGE CURRENT,(A) 24 18 Tj=25°C 8.3ms Single Ha 12 Sine Wave JEDEC method 6 0 1 5 10 50 100 NUMBER OF CYCLES AT 60Hz

FIG.3-MAXIMUM NON-REPETITIVE FORWARD

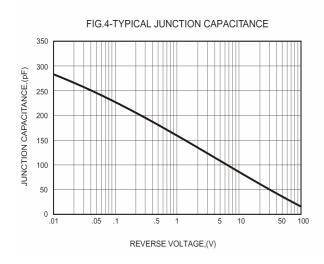


FIG.2-TYPICAL FORWARD **CHARACTERISTICS** 50 INSTANTANEOUS FORWARD CURRENT,(A) 10 3.0 1.0 Tj≟25°C Pulse Width 300us 1% Duty Cycle 0.1 .01 .1 .3 .5 .7 .9 1.1 1.3 1.5 FORWARD VOLTAGE,(V)

