

SR120 THRU SR1200

SCHOTTKY BARRIER RECTIFIERS

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

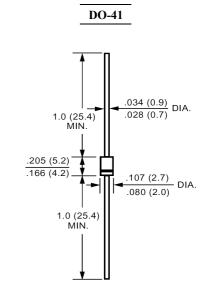
Lead: Axial leads, solderable per MIL-STD-202,

method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any

Weight: 0.012ounce, 0.33gram



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25 $\,$ ambient temperature unless otherwise specified. Single phase, half wave, $60H_{\rm Z}$, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	SR120	SR140	SR150	SR160	SR180	SR1100	SR1500	SR1200	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V _{RMS}	14	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	20	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	I _{FSM}	I _{FSM} 30								Amp
superimposed on rated load (JEDEC method)										
Maximum Forward Voltage at 1.0A DC and 25	$V_{\rm F}$	0.	55	0.	0.70 0		.85 0.		95	Volts
Maximum Reverse Current at T_A =25 at Rated DC Blocking Voltage T_A =100	I_R	0.5 10								mAmp
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 MHz 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

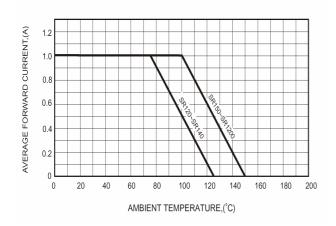
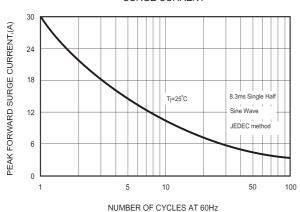
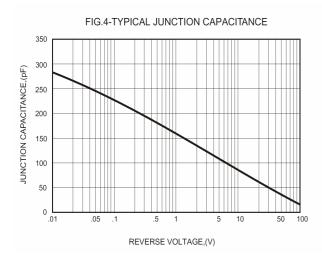


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT





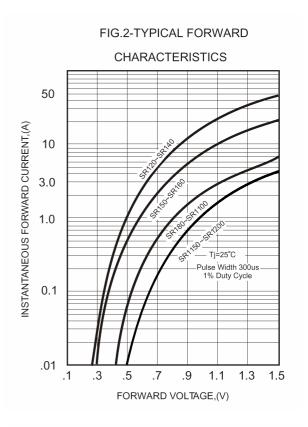


FIG.5 - TYPICAL REVERSE

