

SR150 THRU SR1100

Features

- Guard Ring Protection
- Low Power Loss For High Efficiency
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates Compliant.)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +125°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SR150	SR150	50V	35V	50V
SR160	SR160	60V	42V	60V
SR180	SR180	80V	56V	80V
SR1100	SR110	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

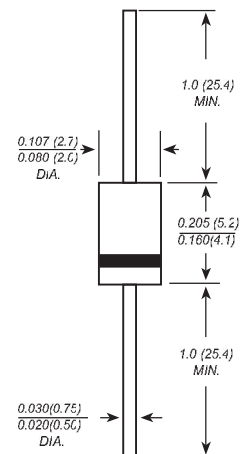
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	.70V	$I_{FM} = 1.0A;$ $T_J = 25^\circ\text{C}^*$
SR150-SR160 SR180-SR1100		.85V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 10mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

1 Amp Schottky Barrier Rectifier 50 - 100 Volts

DO-41

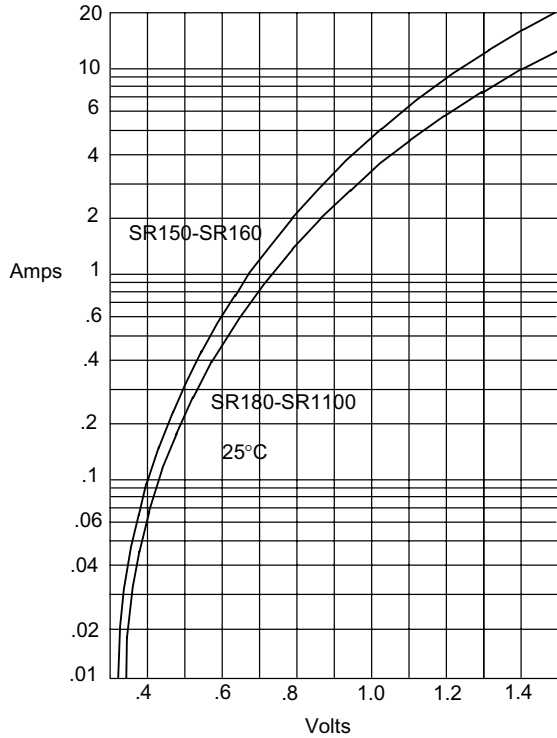


Dimensions in inches and (millimeters)



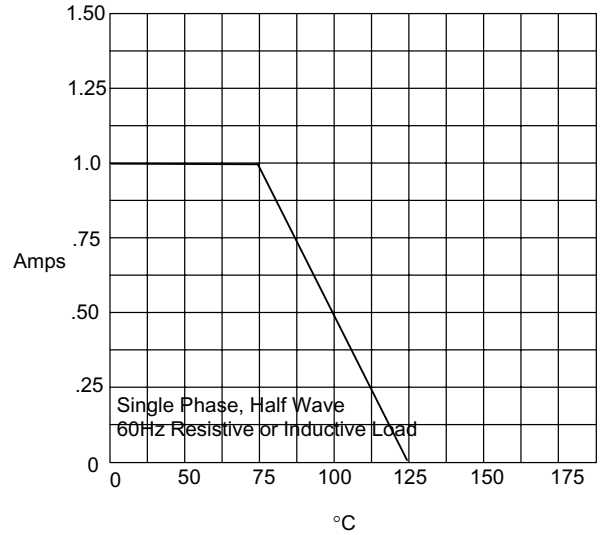
SR150 thru SR1100

Figure 1
Typical Forward Characteristics



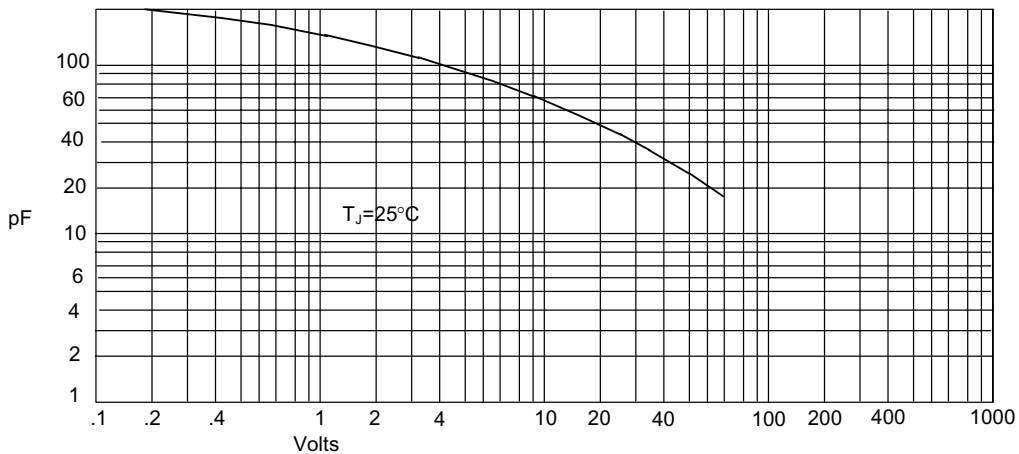
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance

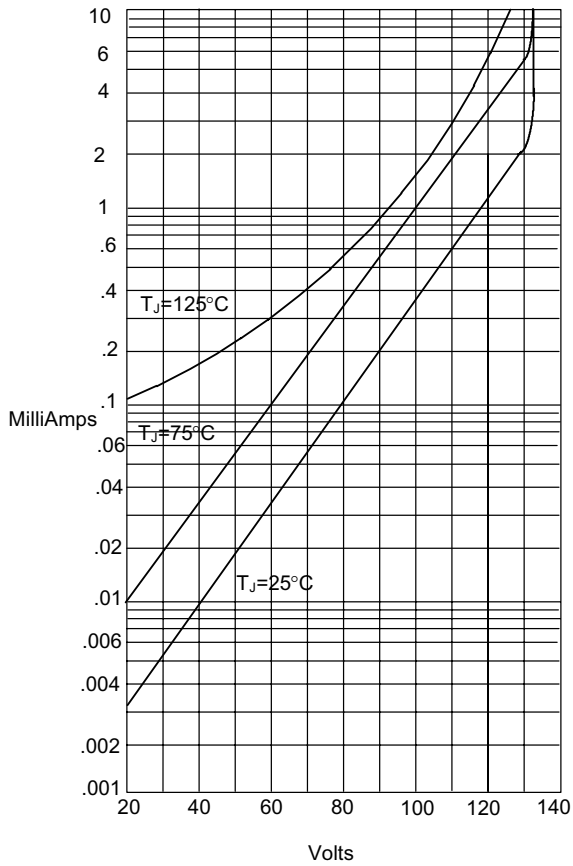


Junction Capacitance - pF *versus*
Reverse Voltage - Volts



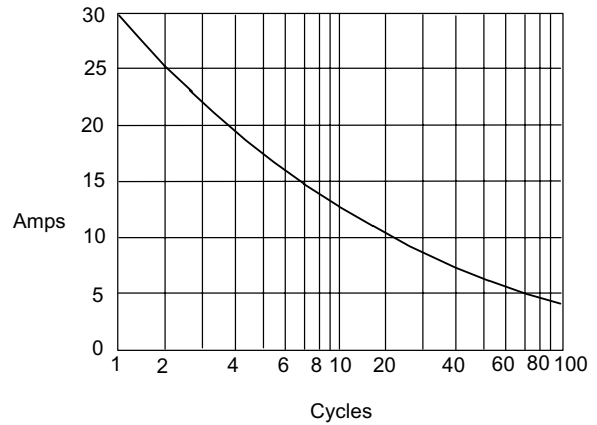
SR105 thru SR1010

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles