

SR105 thru SR110

Features

- Schottky Barrier Rectifier
- Low Forward Voltage
- Low Power Loss For High Efficiency
- High Current Capability

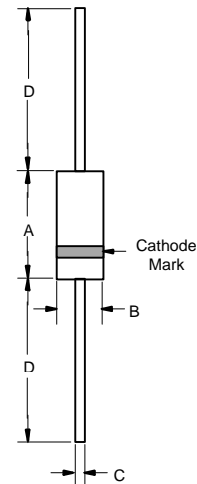
1 Amp Schottky Barrier Rectifier 50 - 100 Volts

Maximum Ratings

- Operating Temperature: -65°C to +125°C
- Storage Temperature: -65°C to +175°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SR105	SR105	50V	35V	50V
SR106	SR106	60V	42V	60V
SR108	SR108	80V	56V	80V
SR1010	SR1010	100V	70V	100V

DO-41



Electrical Characteristics @ 25°C Unless Otherwise Specified

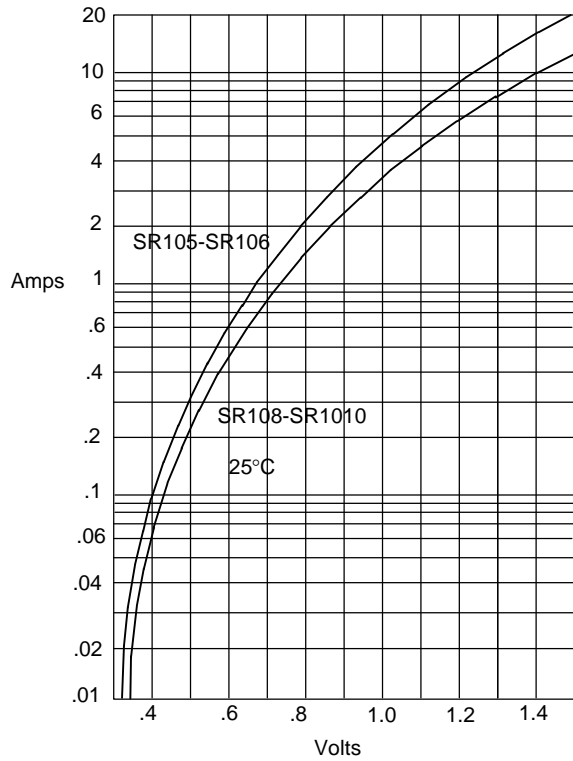
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SR105-SR106 SR108-SR1010	V_F	.70V .80V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	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%

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

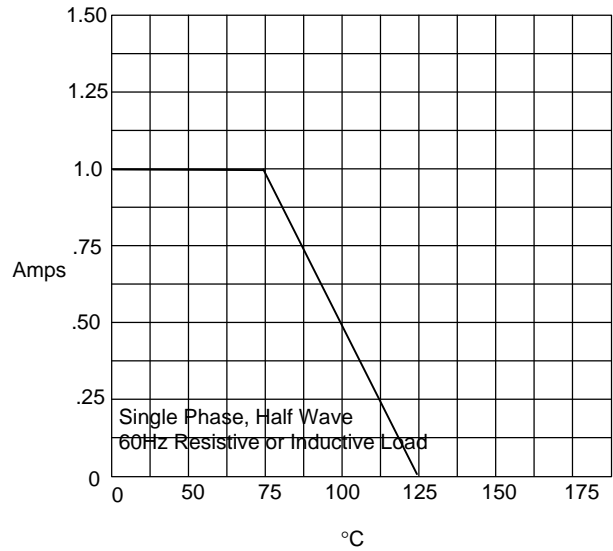
SR105 thru SR1010

Figure 1
Typical Forward Characteristics



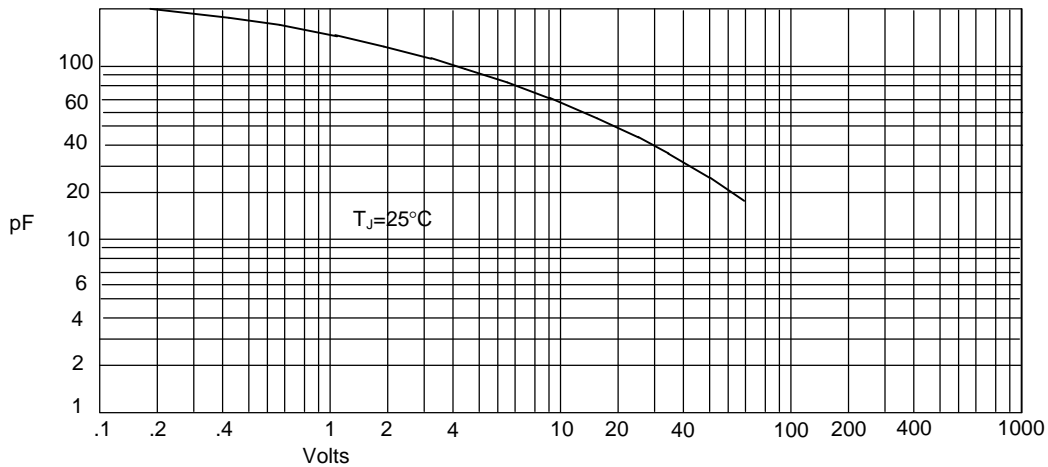
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

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

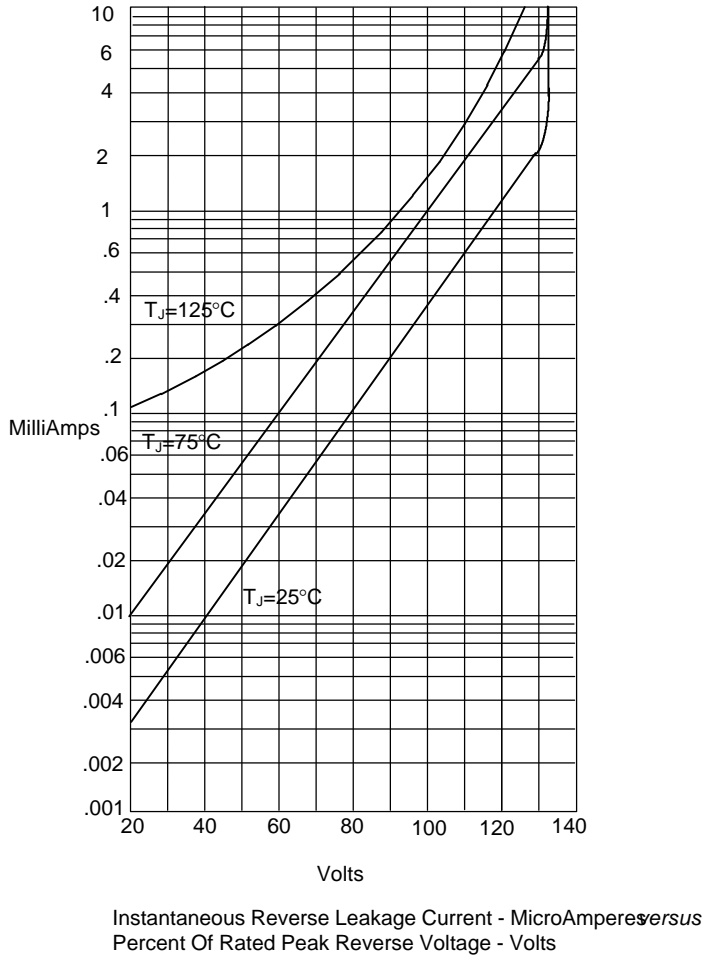


Figure 5
Peak Forward Surge Current

