

### Schottky Barrier Rectifiers

Using the Schottky Barrier principle with a Molybdenum barrier metal. These state-of-the-art geometry features epitaxial construction with oxide passivation and metal overlay contact. Ideally suited for low voltage, high frequency rectification, or as free wheeling and polarity protection diodes.

- \* Low Forward Voltage.
- \* Low Switching noise.
- \* High Current Capacity
- \* Guarantee Reverse Avalanche.
- \* Guard-Ring for Stress Protection.
- \* Low Power Loss & High efficiency.
- \* 125 °C Operating Junction Temperature
- \* Low Stored Charge Majority Carrier Conduction.
- \* Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-0

#### SCHOTTKY BARRIER RECTIFIERS

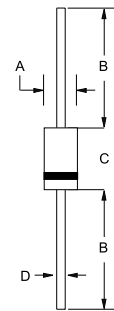
**1.0 AMPERES  
70 -100 VOLTS**



**DO-41**

#### MAXIMUM RATINGS

Characteristic	Symbol	SR				Unit
		107	108	109	1100	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	70	80	90	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	49	56	63	70	V
Average Rectifier Forward Current	$I_O$	1.0				A
Non-Repetitive Peak Surge Current ( Surge applied at rate load conditions halfwave, single phase, 60Hz )	$I_{FSM}$	30				A
Operating and Storage Junction Temperature Range	$T_J, T_{stg}$	- 65 to + 125				°C



DIM	MILLMETERS	
	MIN	MAX
A	2.00	2.70
B	25.40	---
C	4.10	5.20
D	0.70	0.90

#### ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	SR				Unit
		107	108	109	1100	
Maximum Instantaneous Forward Voltage ( $I_F=1.0$ Amp )	$V_F$	0.75		0.85		V
Maximum Instantaneous Reverse Current ( Rated DC Voltage, $T_C = 25$ °C) ( Rated DC Voltage, $T_C = 100$ °C)	$I_R$	1.0 30				mA
Typical Junction Capacitance ( Reverse Voltage of 4 volts & $f=1$ MHz)	$C_p$	70		60		pF

CASE—  
Transfer molded plastic

POLARITY—  
Cathode indicated polarity band

# SR107 , SR108

FIG-1 FORWARD CURRENT DERATING CURVE

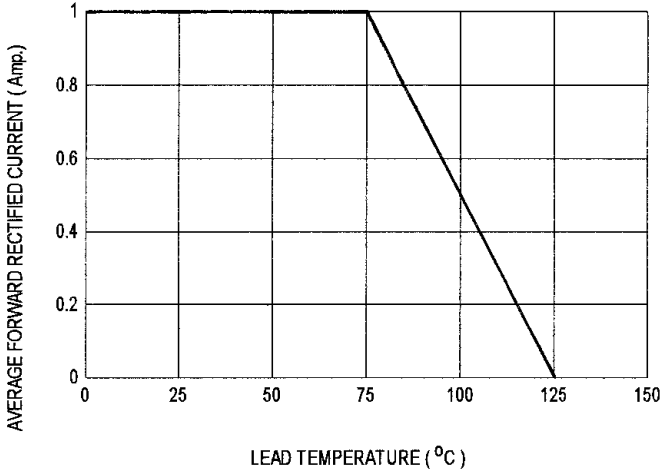


FIG-2 TYPICAL FORWARD CHARACTERISTICS

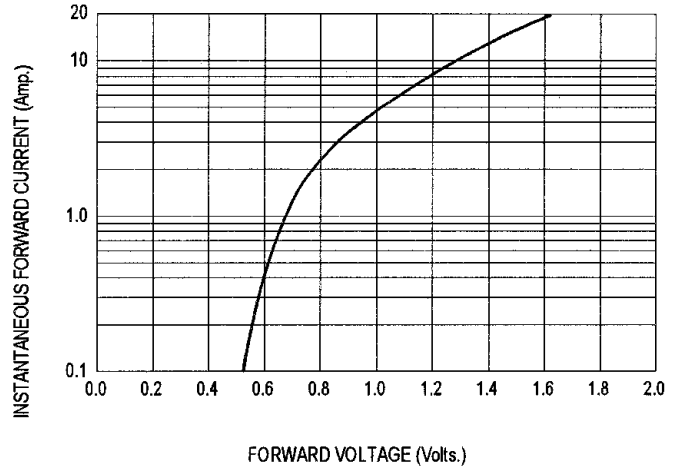


FIG-3 TYPICAL REVERSE CHARACTERISTICS

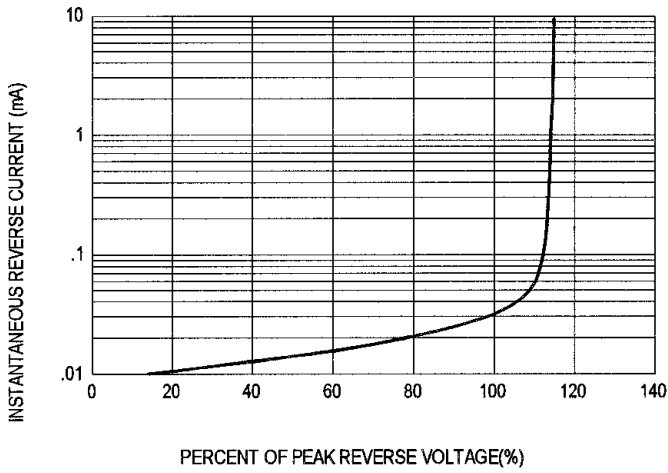


FIG-4 TYPICAL JUNCTION CAPACITANCE

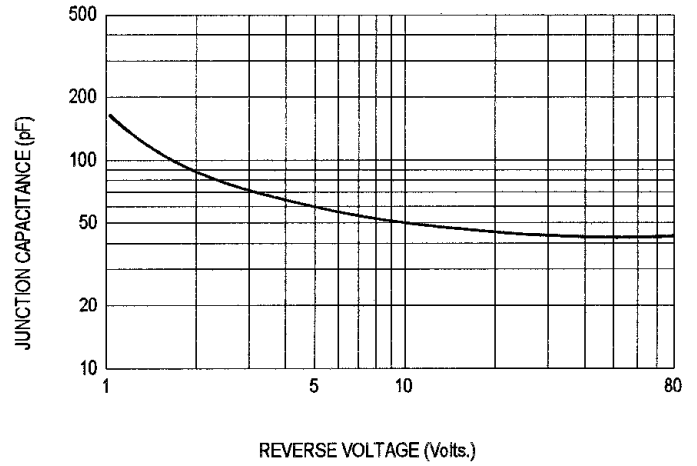
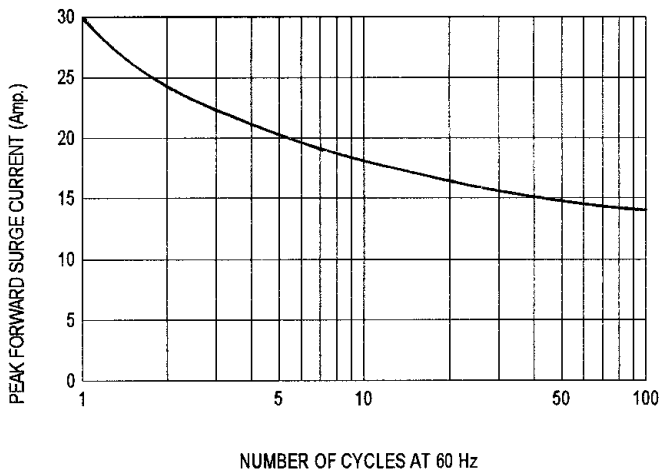


FIG-5 PEAK FORWARD SURGE CURRENT



# SR109 , SR1100

FIG-1 FORWARD CURRENT DERATING CURVE

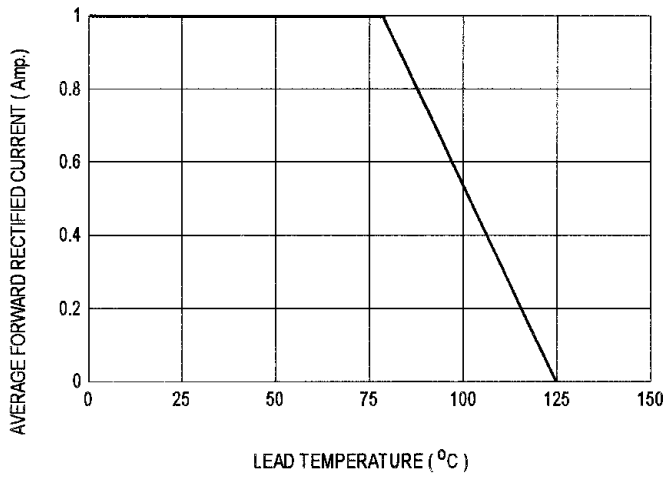


FIG-2 TYPICAL FORWARD CHARACTERISTICS

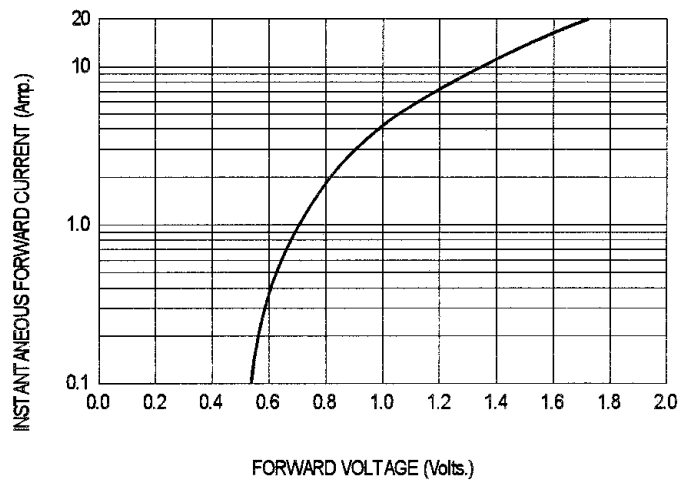


FIG-3 TYPICAL REVERSE CHARACTERISTICS

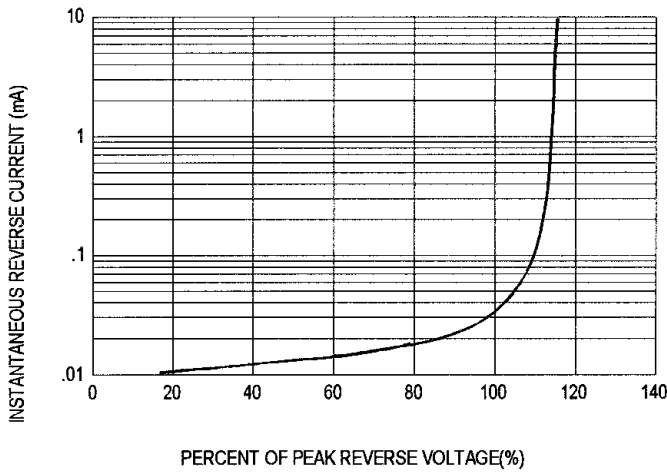


FIG-4 TYPICAL JUNCTION CAPACITANCE

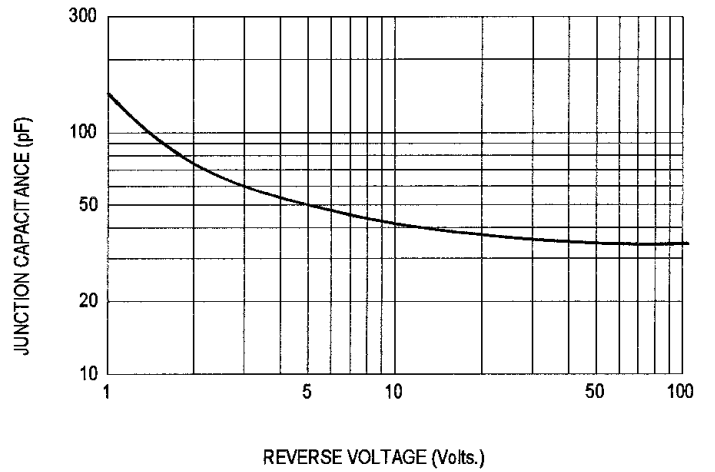


FIG-5 PEAK FORWARD SURGE CURRENT

