

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-O

SCHOTTKY BARRIER RECTIFIERS

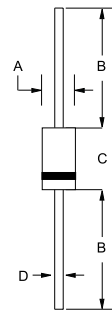
**1.0 AMPERES
70 -100 VOLTS**



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	MILLIMETERS	
	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

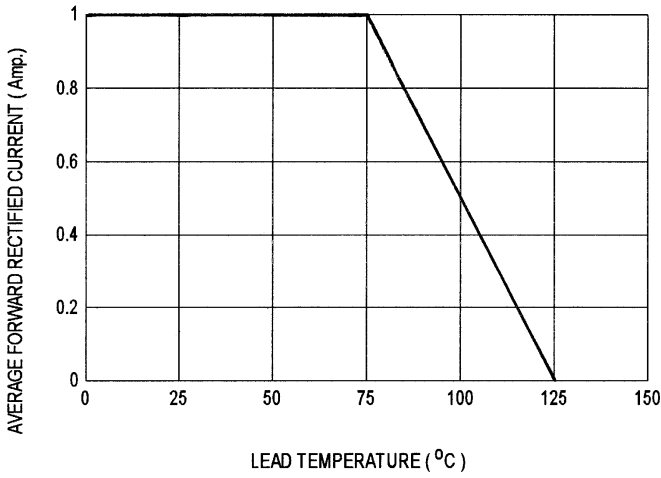


FIG-2 TYPICAL FORWARD CHARACTERISTICS

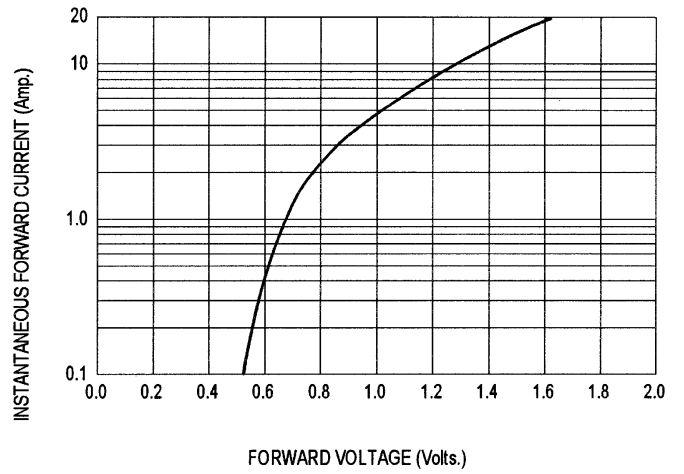


FIG-3 TYPICAL REVERSE CHARACTERISTICS

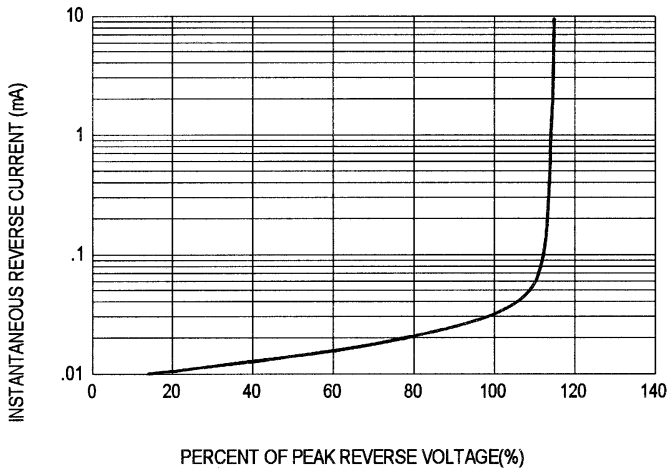


FIG-4 TYPICAL JUNCTION CAPACITANCE

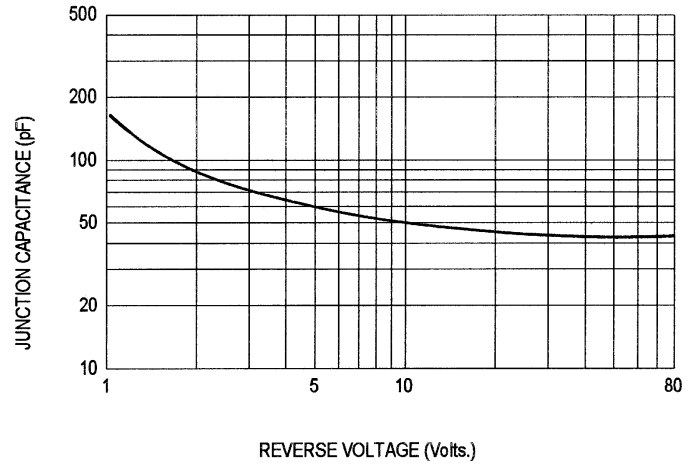
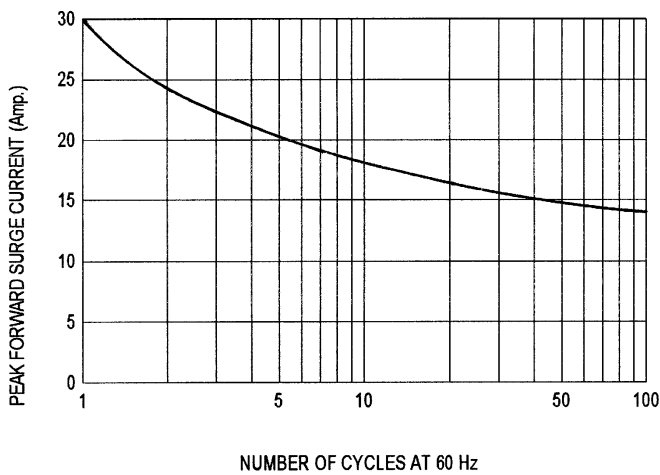


FIG-5 PEAK FORWARD SURGE CURRENT



SR109 , SR1100

FIG-1 FORWARD CURRENT DERATING CURVE

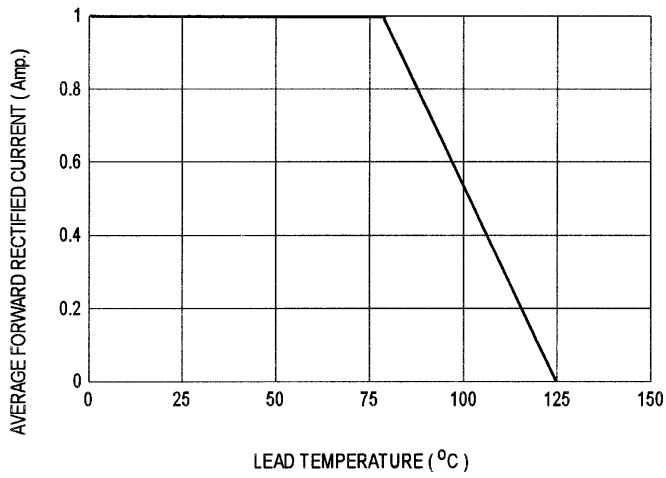


FIG-2 TYPICAL FORWARD CHARACTERISTICS

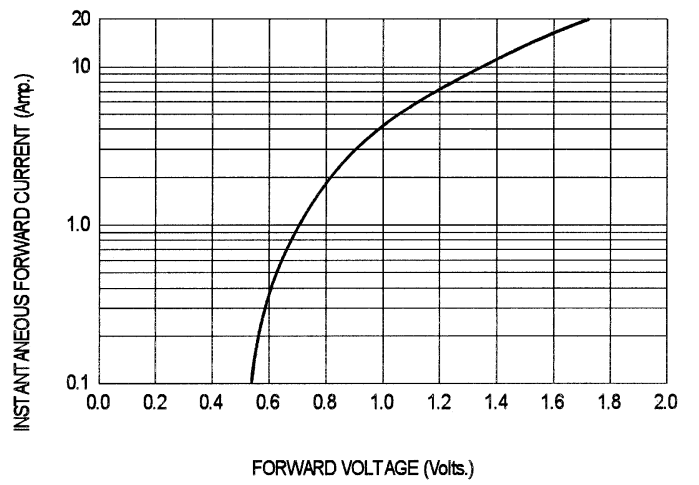


FIG-3 TYPICAL REVERSE CHARACTERISTICS

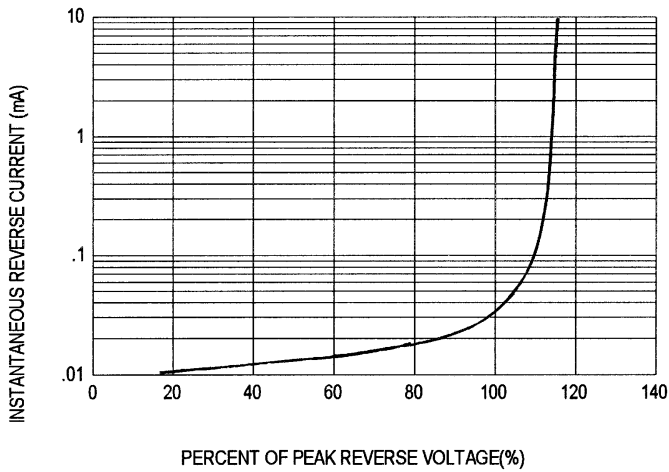


FIG-4 TYPICAL JUNCTION CAPACITANCE

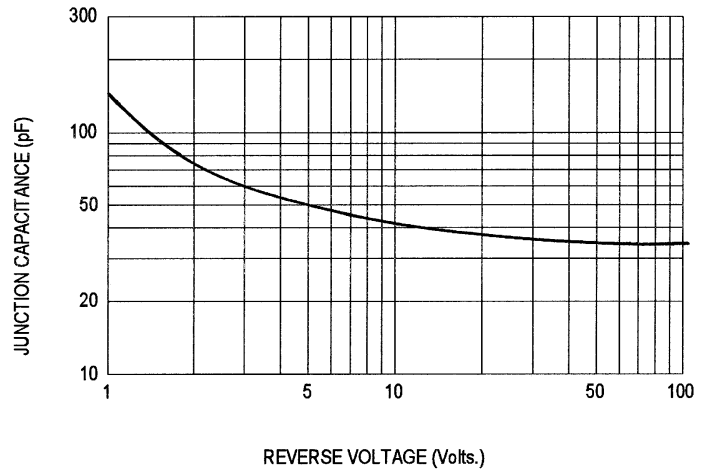


FIG-5 PEAK FORWARD SURGE CURRENT

