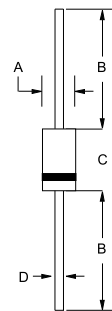


Schottky Barrier Rectifiers

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

SCHOTTKY BARRIER RECTIFIERS
**1.0 AMPERES
20-60 VOLTS**

DO-41

MAXIMUM RATINGS

Characteristic	Symbol	SR102	SR103	SR104	SR105	SR106	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	V
Average Rectifier Forward Current	I_O	1.0					A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I_{FSM}	40					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	SR102	SR103	SR104	SR105	SR106	Unit
Maximum Instantaneous Forward Voltage ($I_F=1.0$ Amp) ($I_F=3.0$ Amp)	V_F		0.550 0.750		0.700 0.850		V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_c = 25$ °C) (Rated DC Voltage, $T_c = 125$ °C)	I_R			1.0 50			mA
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f=1$ MHz)	C_P		90		80		pF

CASE---
Transfer molded
plastic

POLARITY---
Cathode indicated
polarity band

SR102 Thru SR104

FIG-1 FORWARD CURRENT DERATING CURVE

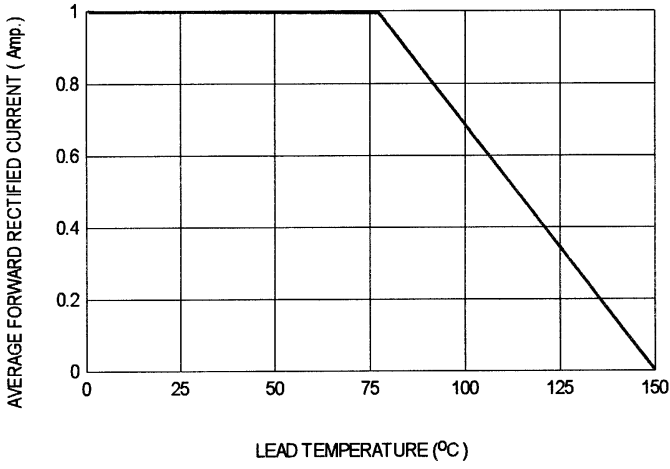


FIG-2 TYPICAL FORWARD CHARACTERISTICS

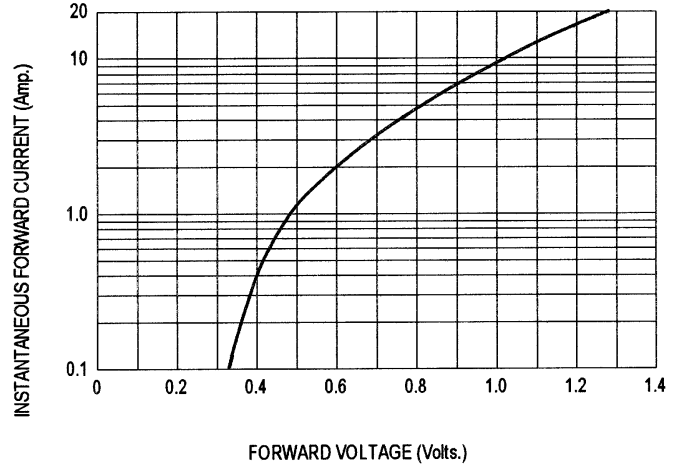


FIG-3 TYPICAL REVERSE CHARACTERISTICS

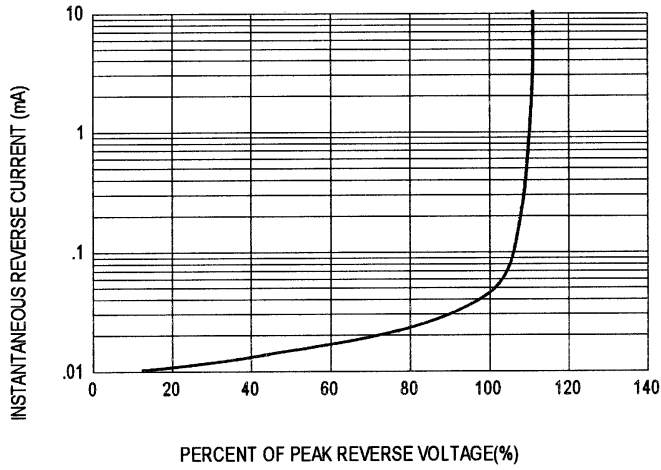


FIG-4 TYPICAL JUNCTION CAPACITANCE

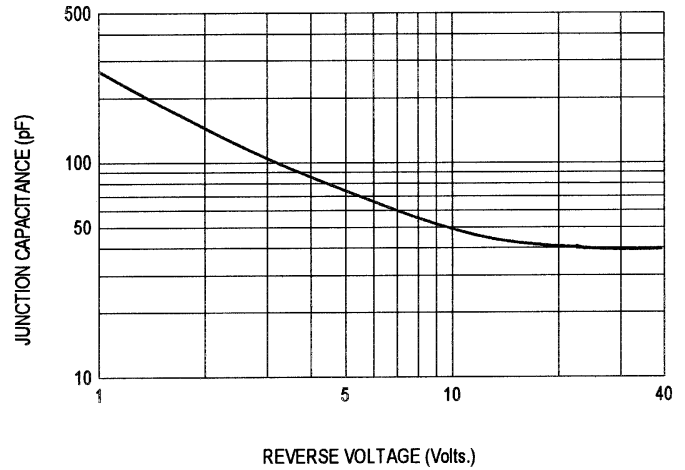
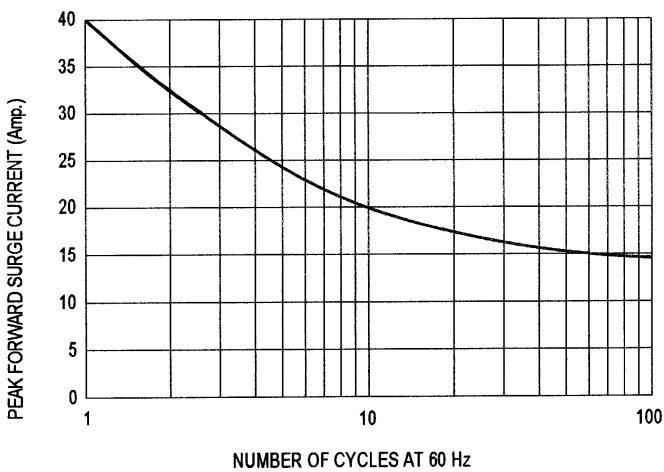


FIG-5 PEAK FORWARD SURGE CURRENT



SR105 , SR106

FIG-1 FORWARD CURRENT DERATING CURVE

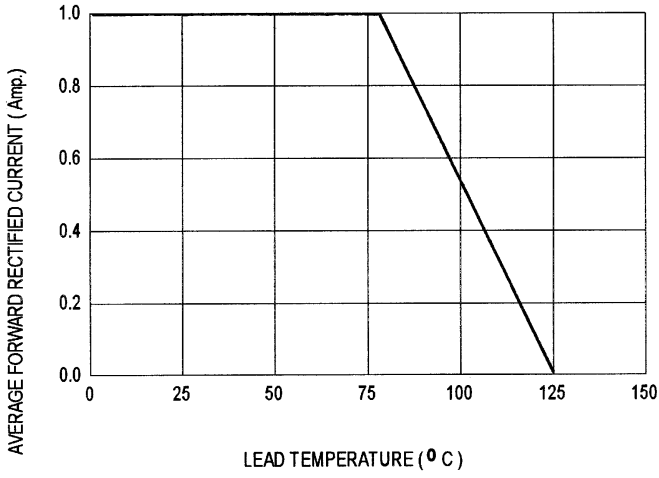


FIG-2 TYPICAL FORWARD CHARACTERISTICS

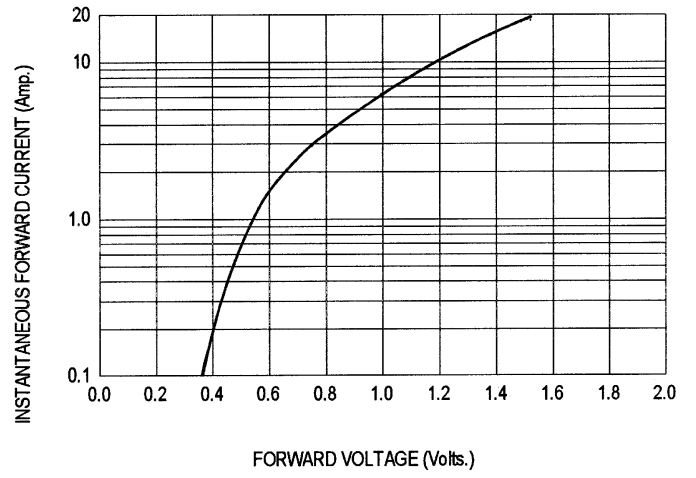


FIG-3 TYPICAL REVERSE CHARACTERISTICS

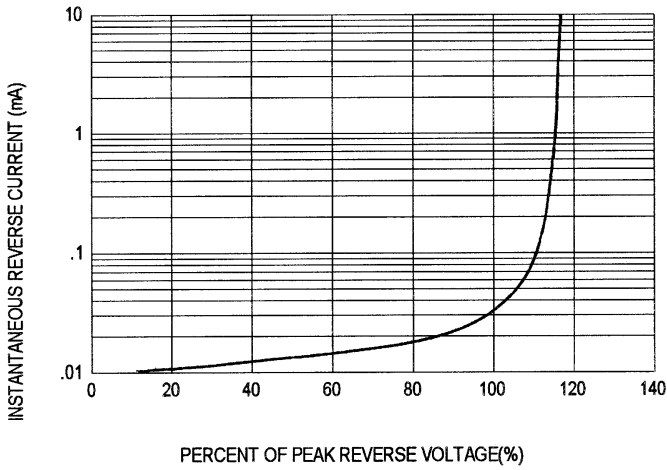


FIG-4 TYPICAL JUNCTION CAPACITANCE

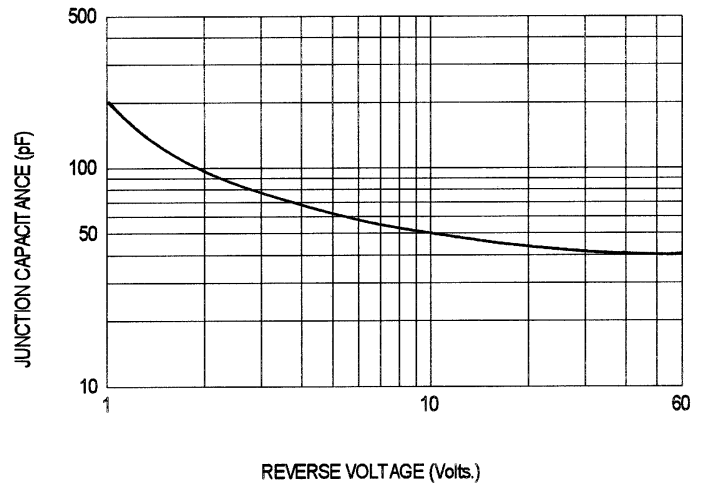


FIG-5 PEAK FORWARD SURGE CURRENT

