

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.

FEATURES

- * Low Forward Voltage.
- * Low Switching noise.
- * High Current Capacity
- * Guarantee Reverse Avalanche.
- * Guard-Ring for Stress Protection.
- * Low Power Loss & High efficiency.
- * 150°C Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction.
- * Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-0



* *In compliance with EU RoHs 2002/95/EC directives*
 The marking is indicated by part no..with "M". ex:SR207M~SR2100M

MAXIMUM RATINGS

Characteristic	Symbol	SR				Unit
		207	208	209	2100	
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	2				A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfwave, single phase,60Hz)	I_{FSM}	50				A
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-65 to +150				°C

ELECTRIAL CHARACTERISTICS

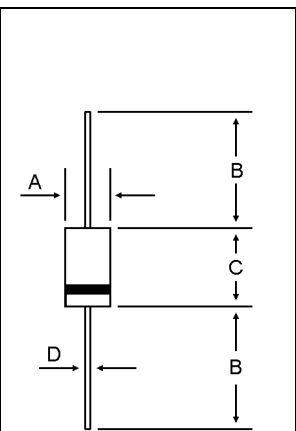
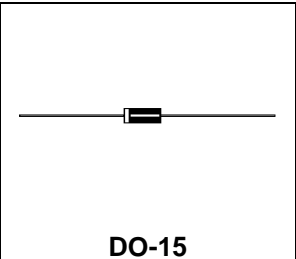
Characteristic	Symbol	SR				Unit
		207	208	209	2100	
Maximum Instantaneous Forward Voltage ($I_F = 2.0$ Amp)	V_F	0.75		0.85		V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ\text{C}$) (Rated DC Voltage, $T_C = 100^\circ\text{C}$)	I_R	0.5 20				mA
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f=1$ MHz)	C_P	80		75		P_F
Typical Thermal Resistance(Note 1)	$R_{\theta JL}$	25				°C/W

Note:

1. Thermal Resistance from Junction to lead length at .375"(9.5mm) temperature, P.C. board mounted

SCHOTTKY BARRIER RECTIFIERS

**2.0 AMPERES
70-100 VOLTS**



DIM	MILLIMETERS	
	MIN	MAX
A	2.60	3.60
B	25.40	---
C	5.50	7.60
D	0.70	0.90

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

SR207 thru SR2100

FIG-1 FORWARD CURRENT DERATING CURVE

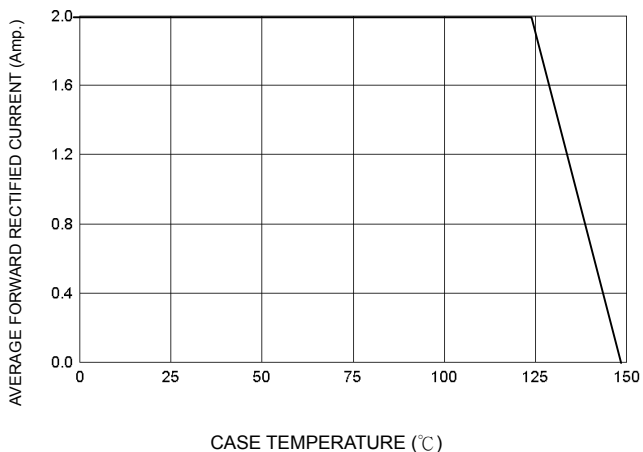


FIG-2 TYPICAL FORWARD CHARACTERISTICS

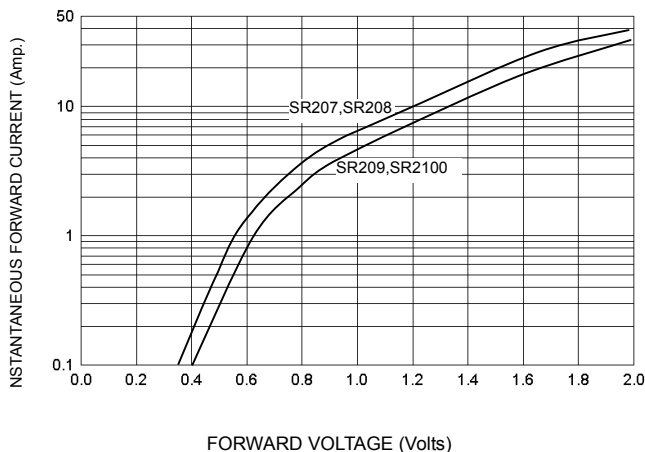


FIG-3 TYPICAL REVERSE CHARACTERISTICS

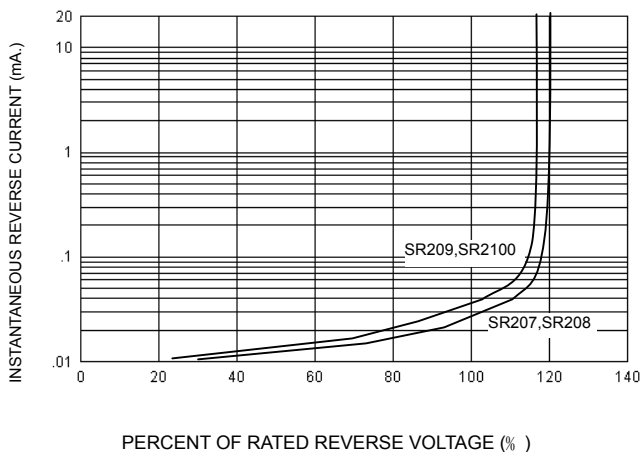


FIG-4 TYPICAL JUNCTION CAPACITANCE

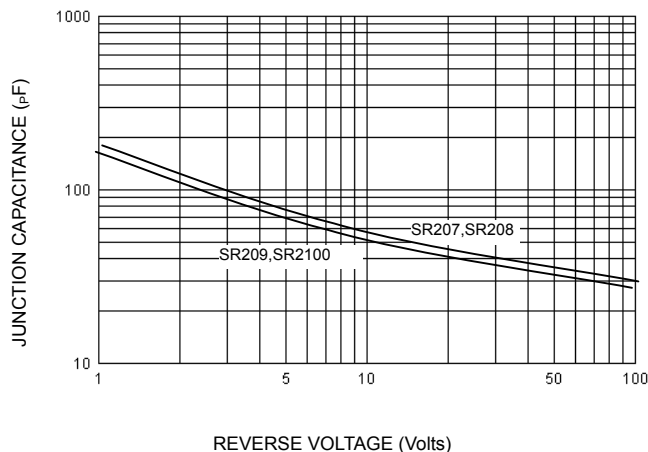
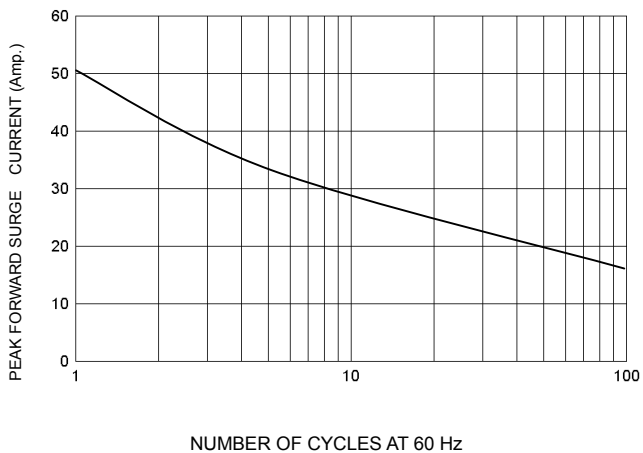


FIG-5 PEAK FORWARD SURGE CURRENT



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