

## 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-O



\* In compliance with EU RoHs 2002/95/EC directives  
The marking is indicated by part no. with. "M". ex:SR302M~SR306M

### MAXIMUM RATINGS

Characteristic	Symbol	SR					Unit
		302	303	304	305	306	
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	$I_O$	3.0					A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase,60Hz )	$I_{FSM}$	75					A
Junction Operating Temperature Range Storage Temperature (1)	$T_J$ $T_{STG}$	-65 to +150 20~35 °C 、 30%~60% RH					°C

(1)expired date : 1 year

### ELECTRIAL CHARACTERISTICS

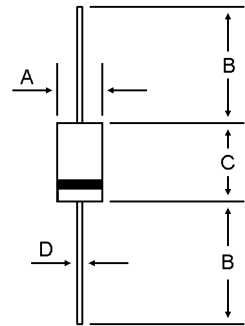
Characteristic	Symbol	SR					Unit
		302	303	304	305	306	
Maximum Instantaneous Forward Voltage ( $I_F = 3.0$ Amp)	$V_F$	0.550			0.700		V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ\text{C}$ ) (Rated DC Voltage, $T_C = 125^\circ\text{C}$ )	$I_R$	0.5 20					mA
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f=1$ MHz)	$C_P$	210			190		pF

### SCHOTTKY BARRIER RECTIFIERS

**3.0 AMPERES  
20-60 VOLTS**



**DO-201AD**



DIM	MILLIMETERS	
	MIN	MAX
A	5.00	5.60
B	25.40	---
C	7.20	9.50
D	1.20	1.30

CASE---  
Transfer molded plastic

POLARITY---  
Cathode indicated polarity band

# SR302 Thru SR306

FIG-1 FORWARD CURRENT DERATING CURVE

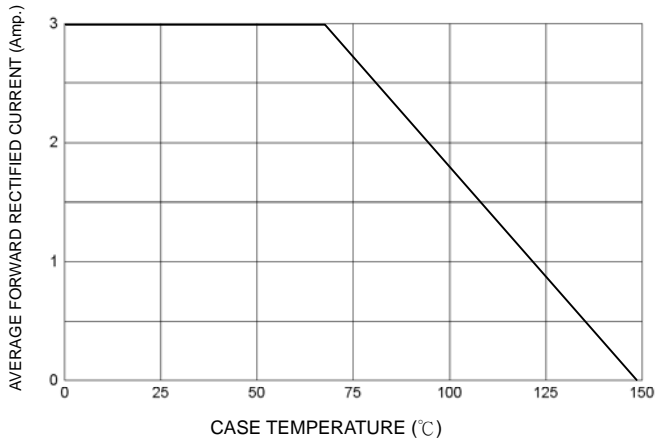


FIG-2 TYPICAL FORWARD CHARACTERISTICS

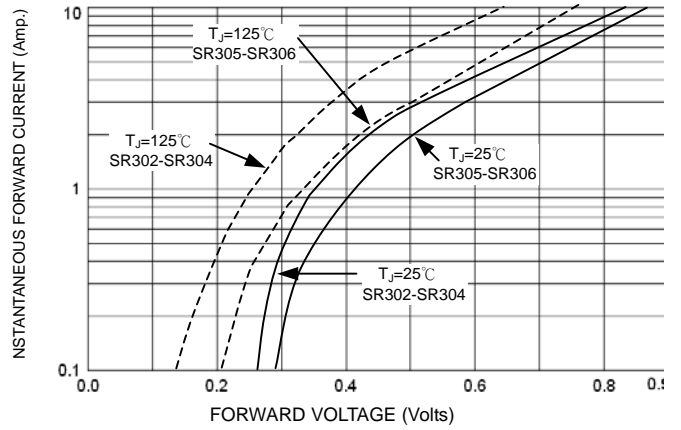


FIG-3 TYPICAL REVERSE CHARACTERISTICS

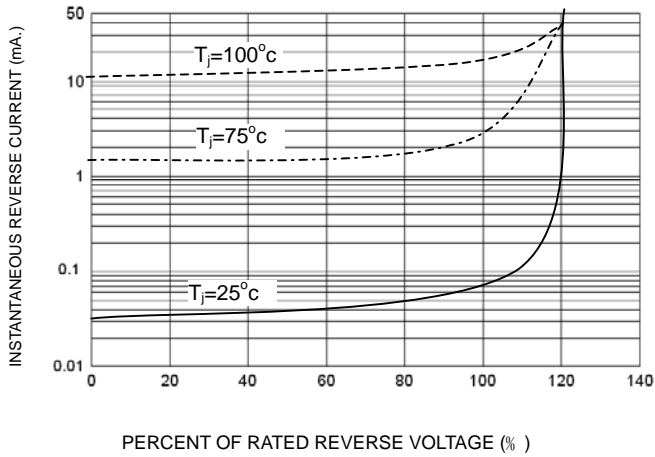


FIG-4 TYPICAL JUNCTION CAPACITANCE

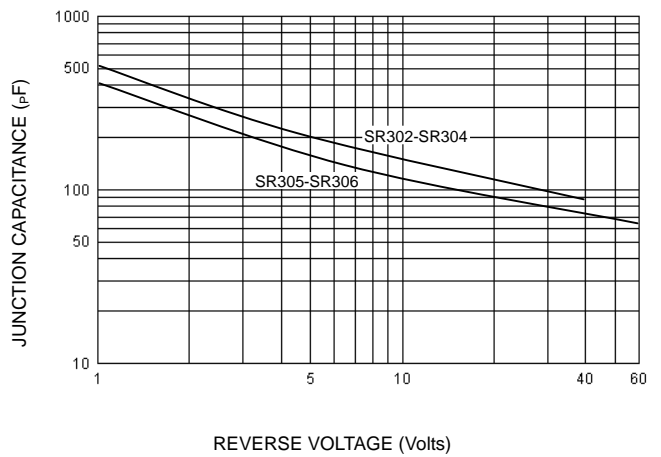
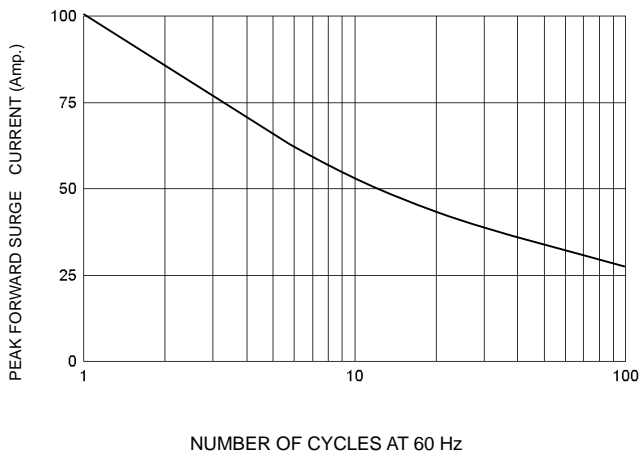


FIG-5 PEAK FORWARD SURGE CURRENT



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