

## 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.
- \* 175 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:SR5150M

### MAXIMUM RATINGS

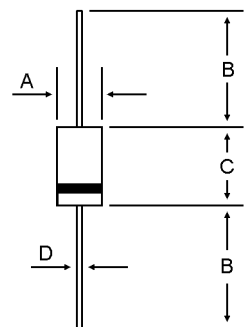
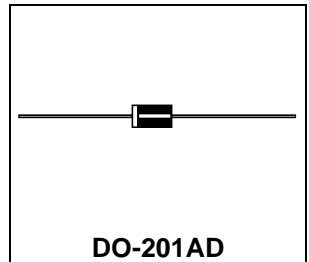
Characteristic	Symbol	SR5150	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	150	V
RMS Reverse Voltage	$V_{R(RMS)}$	105	V
Average Rectifier Forward Current Total Device (Rated $V_R$ ), $T_C=100$	$I_{F(AV)}$	5	A
Peak Repetitive Forward Current (Rate $V_R$ , Square Wave, 20kHz)	$I_{FM}$	10	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfwave, single phase, 60Hz)	$I_{FSM}$	125	A
Operating and Storage Junction Temperature Range	$T_J, T_{stg}$	-65 to +175	

### ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SR5150	Unit
Maximum Instantaneous Forward Voltage ( $I_F=5.0$ Amp $T_C=25$ ) ( $I_F=5.0$ Amp $T_C=125$ )	$V_F$	0.95 0.85	V
Maximum Instantaneous Reverse Current ( Rated DC Voltage, $T_C=25$ ) ( Rated DC Voltage, $T_C=125$ )	$I_R$	0.5 10	mA

### SCHOTTKY BARRIER RECTIFIERS

**5 AMPERES  
150 VOLTS**



DIM	MILLIMETERS	
	MIN	MAX
A	5.00	5.60
B	25.40	---
C	8.50	9.50
D	1.20	1.30

CASE---  
Transfer molded plastic

POLARITY---  
Cathode indicated polarity band

# SR5150

FIG-1 FORWARD CURRENT DERATING CURVE

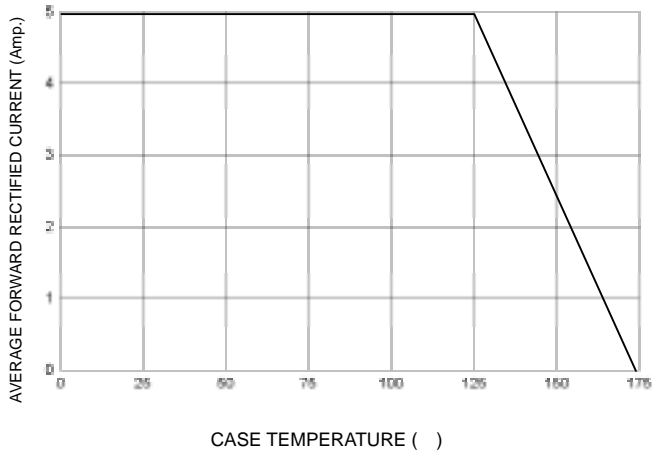


FIG-2 TYPICAL FORWARD CHARACTERISTICS

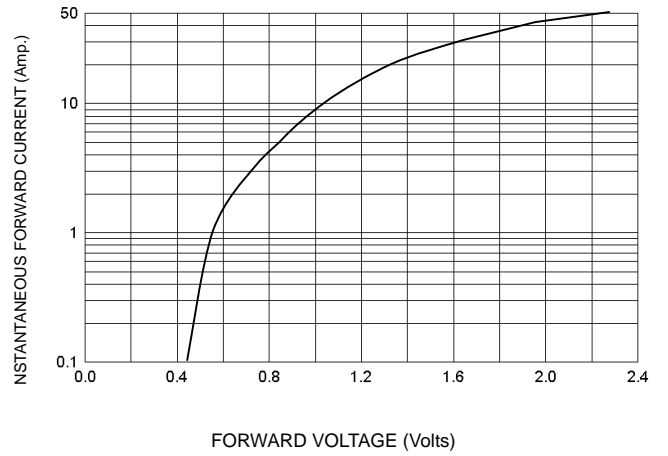


FIG-3 TYPICAL REVERSE CHARACTERISTICS

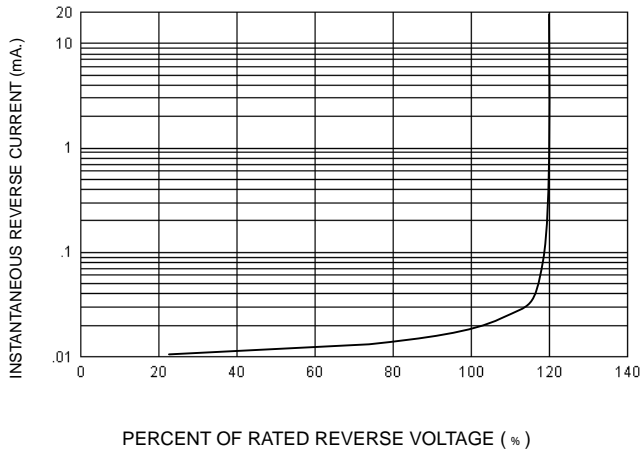


FIG-4 TYPICAL JUNCTION CAPACITANCE

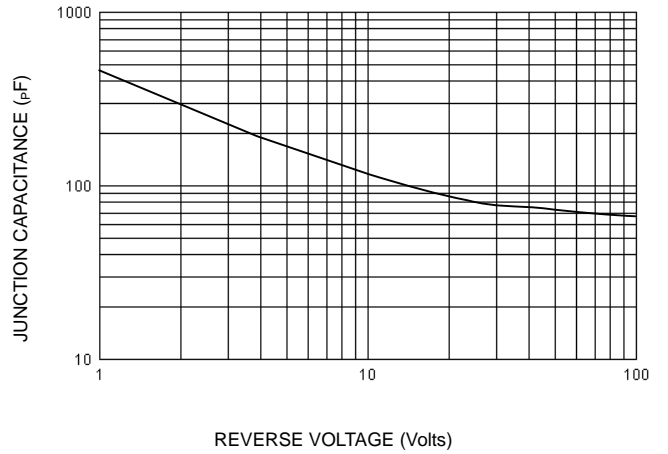


FIG-5 PEAK FORWARD SURGE CURRENT

