Schottky Barrier Rectifiers

Using the Schottky Barrier principle with a Refractory metal capable of high temperature operation metal. proprietary barrier technology allows for reliable operation up to 150℃ junction temperature. Typical application are in switching Mode Power Supplies such as adaptors, DC/DC converters free-wheeling and polarity protection diodes.

SCHOTTKY BARRIER RECTIFIERS

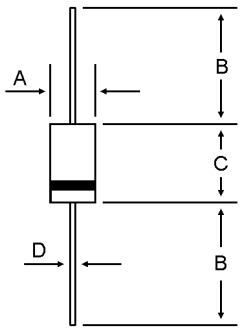
2.0 AMPERES
150 VOLTS

DO-15

Features

- ＊Low Forward Voltage.
- ＊Low Switching noise.
- ＊High Current Capacity
- ＊Guarantee Reverse Avalanche.
- ＊Guard-Ring for Stress Protection.
- ＊Low Power Loss & High efficiency.
- ＊150℃ Operating Junction Temperature
- ＊Low Stored Charge Majority Carrier Conduction.
- ＊Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O
- ＊Moisture Sensitivity Level: MSL-1

＊*In compliance with EU RoHs 2002/95/EC directives*
The marking is indicated by part no. with. “M”. ex:SR2150M



DIM	MILLIMETERS	
	MIN	MAX
A	2.60	3.60
B	25.40	---
C	5.80	7.60
D	0.70	0.90

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

MAXIMUM RATINGS

Characteristic	Symbol	SR2150	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	I_O	2.0	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I_{FSM}	50	A
Operating and Storage Junction Temperature Range	T_J , T_{STG}	-65 to +150	℃

ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SR2150	Unit
Maximum Instantaneous Forward Voltage (I_F =2.0 Amp.)	V_F	0.95	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, T_C = 25℃) (Rated DC Voltage, T_C = 125℃)	I_R	0.01 10	mA
Maximum Thermal Resistance Junction to case	$R_{\theta JC}$	55	℃/W
Typical Junction Capacitance (Reverse Voltage of 4 volts & f=1 MHz)	C_P	80	pF

SR2150

FIG-1 FORWARD CURRENT DERATING CURVE

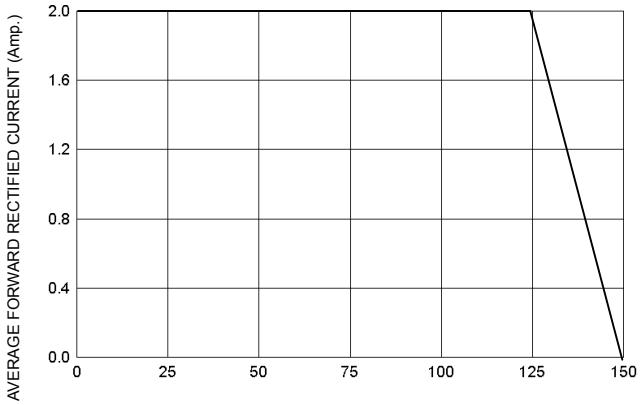


FIG-2 TYPICAL FORWARD CHARACTERISITICS

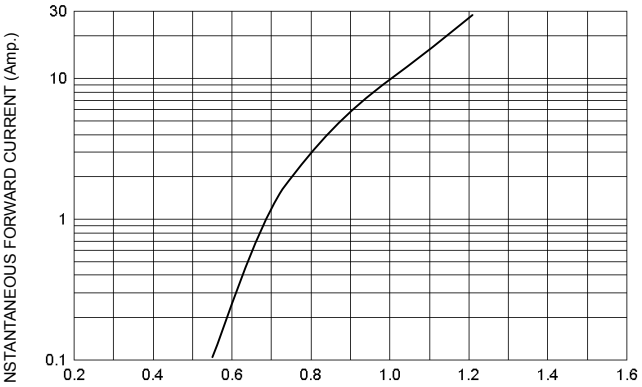


FIG-3 TYPICAL REVERSE CHARACTERISTICS

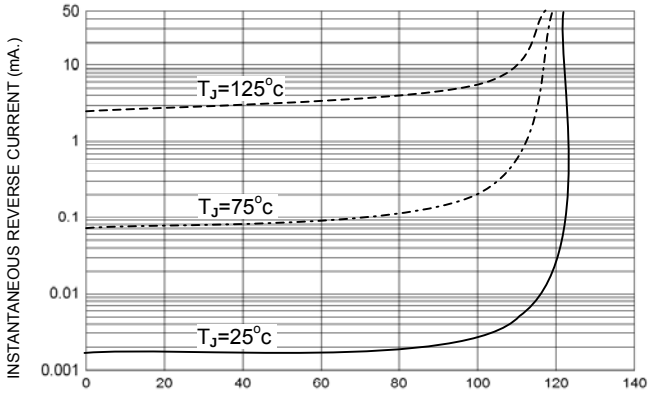


FIG-4 TYPICAL JUNCTION CAPACITANCE

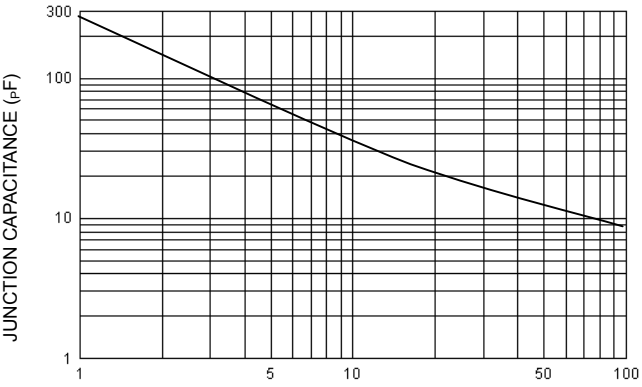
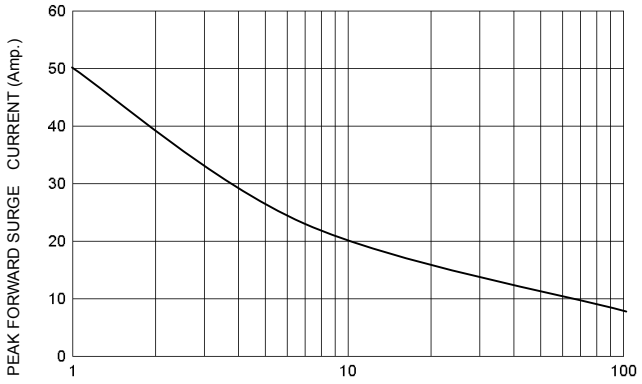


FIG-5 PEAK FORWARD SURGE CURRENT



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