

Surface Mount 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°C Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction.
- * Plastic Material used Carries Underwriters Laboratory
Flammability Classification 94V-O



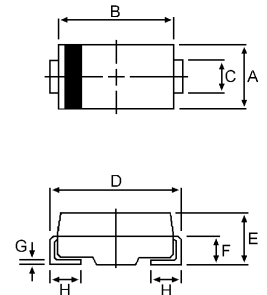
- * *In compliance with EU RoHs 2002/95/EC directives*
- * *"G" Green product*
The green product is before indicated by the date code "XMY" with alphabet "G"XMY

SCHOTTKY BARRIER RECTIFIERS

**5 AMPERES
150 VOLTS**



DO-214AA(SMB)



MAXIMUM RATINGS

Characteristic	Symbol	SR515	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), $T_C=100^\circ\text{C}$	$I_{F(AV)}$	5	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfwave, single phase, 60Hz)	I_{FSM}	90	A
Operating and Storage Junction Temperature Range	T_J , T_{stg}	-65 to +175	$^\circ\text{C}$

DIM	MILLIMETERS	
	MIN	MAX
A	3.30	3.90
B	4.20	4.60
C	1.80	2.20
D	5.10	5.60
E	1.90	2.50
F	--	1.30
G	--	0.22
H	0.95	1.35

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	SR515	Unit
Maximum Instantaneous Forward Voltage ($I_F=5.0$ Amp $T_C=25^\circ\text{C}$) ($I_F=5.0$ Amp $T_C=125^\circ\text{C}$)	V_F	0.95 0.85	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	0.01 10	mA

CASE---
Transfer molded
plastic

POLARITY---
Cathode indicated
polarity band

FIG-1 FORWARD CURRENT DERATING CURVE

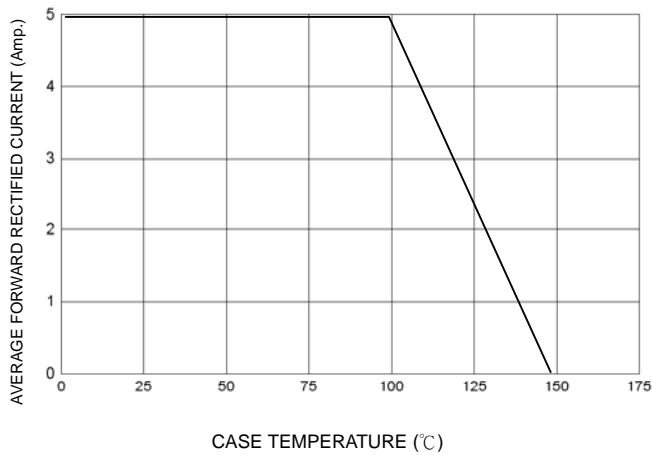


FIG-2 TYPICAL FORWARD CHARACTERISTICS

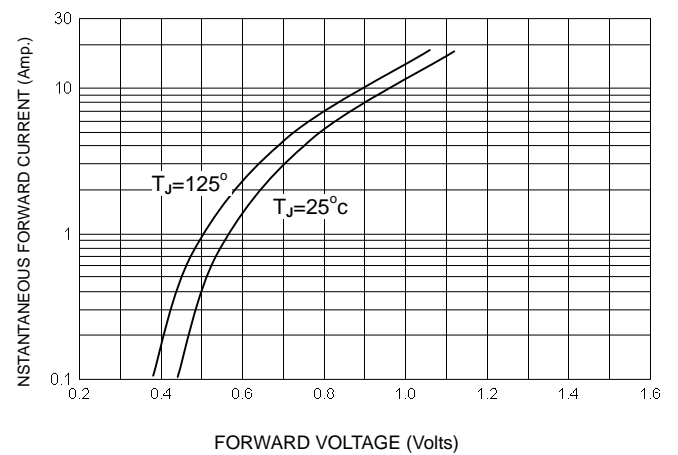


FIG-3 TYPICAL REVERSE CHARACTERISTICS

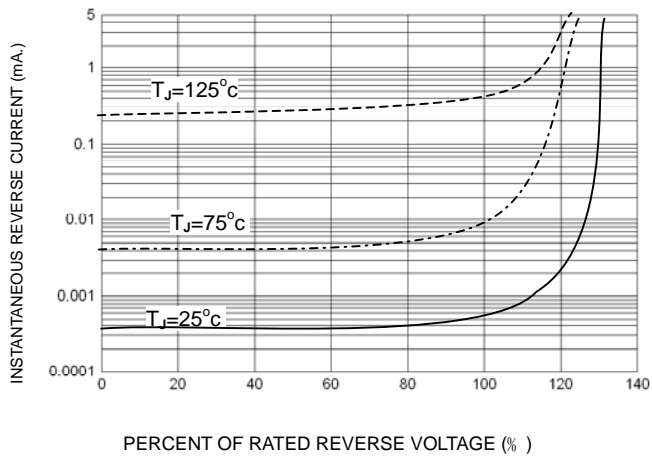


FIG-4 TYPICAL JUNCTION CAPACITANCE

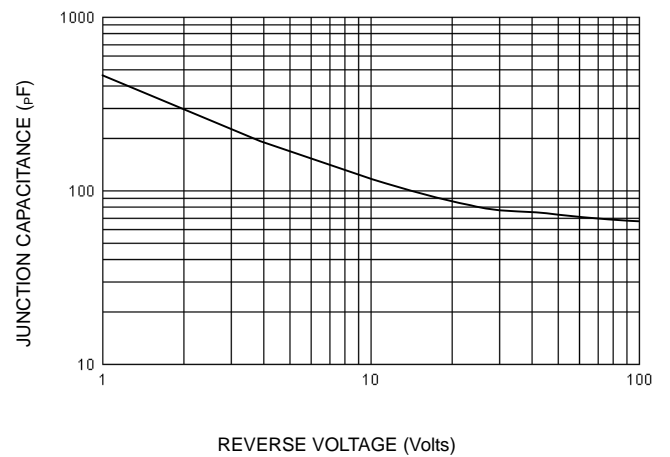
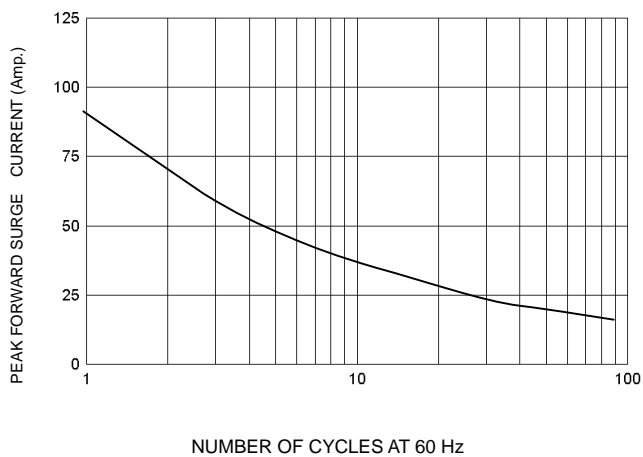


FIG-5 PEAK FORWARD SURGE CURRENT



REMARK: Green product is indicated by carton “Halogen-free”

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