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#### Switchmode Full Plastic Dual Schottky Barrier Power 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.
- \* Low Stored Charge Majority Carrier Conduction.
- \* Plastic Material used Carries Underwriters Laboratory
- \* ESD: 8KV(Min.) Human-Body Model

\* Flammability Classification 94V-O

\* Pb free

- \* In compliance with EU RoHs directives
- \* "G" Green product

The green product before is indicated by the date code" <u>XMY</u>" with alphabet "G"<u>XMY</u>

#### MAXIMUM RATINGS

Characteristic	Symbol	SRF1060C	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	60	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	42	V
Average Rectifier Forward Current ( per doode ) Total Device (Rated $V_R$ ),	I <sub>F(AV)</sub>	5 10	А
Peak Repetitive Forward Current (Rate V <sub>R</sub> , Square Wave, 20kHz)	I <sub>FM</sub>	10	А
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I <sub>FSM</sub>	125	A
Junction Temperature	TJ	150	°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +150	°C

#### **ELECTRICAL CHARACTERISTICS**

Characteristic	Symbol	Min.	Тур.	Max.	Unit
Maximum Instantaneous Forward Voltage (I <sub>F</sub> =5 Amp T <sub>C</sub> = 25℃) (I <sub>F</sub> =5 Amp T <sub>C</sub> = 125℃)	V <sub>F</sub>		0.65 0.56	0.7	V
Typical Thermal Resistance junction to case	R <sub>θjc</sub>		4.2		°C <b>/w</b>
Maximum Instantaneous Reverse Current ( Rated DC Voltage, T <sub>C</sub> = 25°C) ( Rated DC Voltage, T <sub>C</sub> = 125°C)	I <sub>R</sub>		0.01 10	0.5	mA



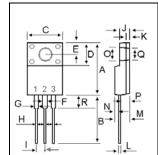
Schottky Barrier

RECTIFIERS

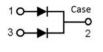
**10 AMPERES** 

60 VOLTS





DIM	MILLIMETERS			
DIV	MIN	MAX		
Α	14.80	16.10		
В	12.65	13.80		
С	9.85	10.36		
D	4.60	6.80		
Е	2.50	3.50		
F	1.00	1.45		
G	1.00	1.45		
н	0.30	0.90		
1	2.40	2.70		
J	2.34	3.30		
К	0.55	1.30		
L	0.36	0.80		
Μ	4.20	4.90		
Ν	1.10	1.80		
0	2.90	3.50		
Р	2.50	3.15		
Q	2.90	3.50		
R	3.10	4.85		







## **SRF1060C**

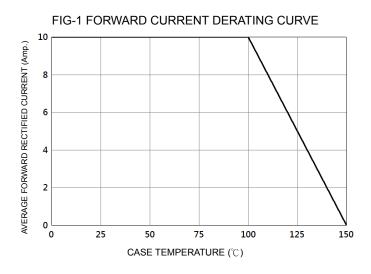


FIG-2 TYPICAL FORWARD CHARACTERISTICS

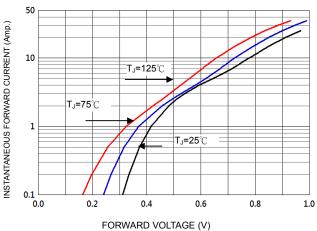


FIG-3 TYPICAL REVERSE CHARACTERISTICS

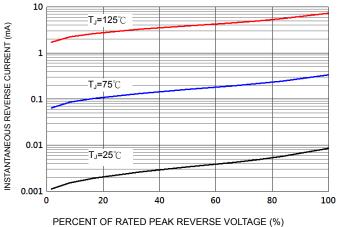
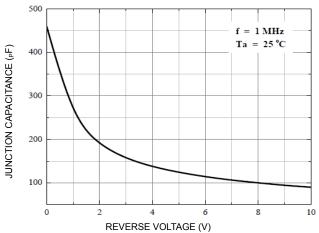


FIG-5 PEAK FORWARD SURGE CURRENT

125 PEAK FORWARD SURGE CURRENT (Amp.) 100 75 50 25 0 l 1 10 100

NUMBER OF CYCLES AT 60 Hz

FIG-4 TYPICAL JUNCTION CAPACITANCE





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