

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.

- * 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

SCHOTTKY BARRIER RECTIFIERS

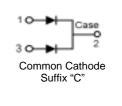
20 AMPERES 120 VOLTS



MAXIMUM RATINGS

Characteristic	Symbol	SRF20120CE	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	120	V
RMS Reverse Voltage	V _{R(RMS)}	84	V
Average Rectifier Forward Current Total Device (Rated V _R),T _C =100	I _{F(AV)}	10 20	А
Peak Repetitive Forward Current (Rate V _R , Square Wave, 20kHz)	I _{FM}	20	Α
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I _{FSM}	200	А
Operating and Storage Junction Temperature Range	T_J , T_STG	-65 to +150	

DIM	MILLIMETERS			
וויכ	MIN	MAX		
Α	15.05	15.15		
В	13.35	13.45		
С	10.00	10.10		
D	6.55	6.65		
Ε	2.65	2.75		
F	1.55	1.65		
G	1.15	1.25		
Н	0.55	0.65		
I	2.50	2.60		
J	3.00	3.20		
K	1.10	1.20		
L	0.55	0.65		
M	4.40	4.60		
N	1.15	1.25		
Р	2.65	2.75		
0	3.35	3.45		
Q	3.15	3.25		



ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SRF20120CE	Unit
Maximum Instantaneous Forward Voltage ($I_F = 10 \text{ Amp } T_C = 25$) ($I_F = 10 \text{ Amp } T_C = 125$)	V _F	0.85 0.68	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25$) (Rated DC Voltage, $T_C = 125$)	I _R	0.5 20	mA



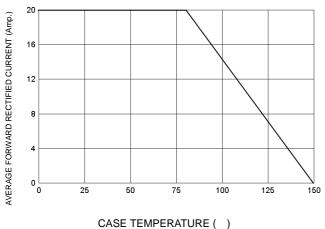
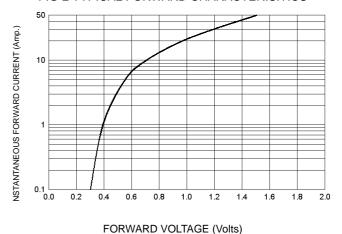


FIG-2 TYPICAL FORWARD CHARACTERISITICS



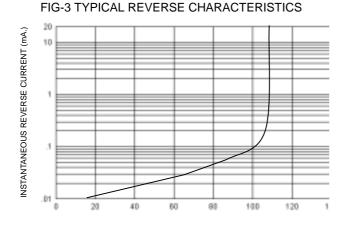
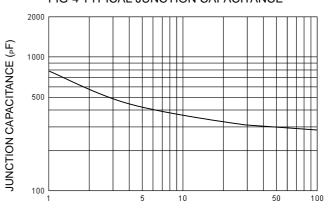


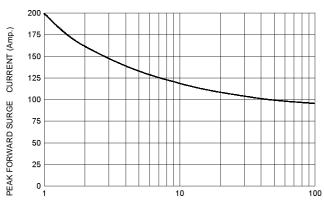
FIG-4 TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE (Volts)

PERCENT OF RATED REVERSE VOLTAGE (%)

FIG-5 PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60 Hz



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