

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

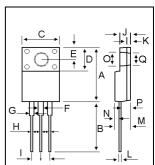
SCHOTTKY BARRIER RECTIFIERS

30 AMPERES 30-60 VOLTS

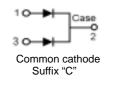


MAXIMUM RATINGS

Characteristic	Symbol	SRF30						Unit
		30CE	35CE	40CE	45CE	50CE	60CE	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	30	35	40	45	50	60	V
RMS Reverse Voltage	V _{R(RMS)}	21	25	28	32	35	42	V
Average Rectifier Forward Current Total Device (Rated V _R),T _C =100	I _{F(AV)}	15 30					Α	
Peak Repetitive Forward Current (Rate V _R , Square Wave, 20kHz)	I _{FM}	30					А	
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I _{FSM}	225					Α	
Operating and Storage Junction Temperature Range	T_J , T_STG	-65 to +125						



DIM	MILLIMETERS					
ווועו	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				
ı	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	SRF30					Unit
Characteristic		30CE	35CE	40CE	45CE	50CE	60CE
Maximum Instantaneous Forward Voltage ($I_F = 15 \text{ Amp } T_C = 25$) ($I_F = 15 \text{ Amp } T_C = 100$)	V _F	0.57 0.50			0.65 0.58		V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25$) (Rated DC Voltage, $T_C = 125$)	I _R	0.5 30				mA	

SRF3030CE Thru SRF3060CE



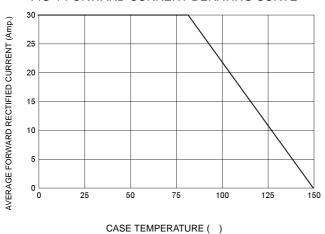
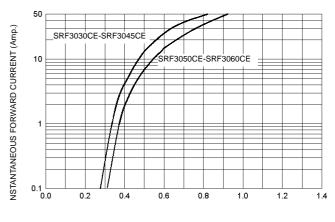
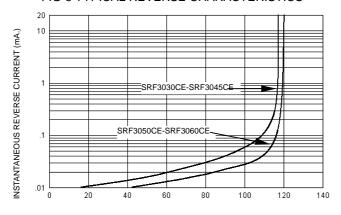


FIG-2 TYPICAL FORWARD CHARACTERISITICS



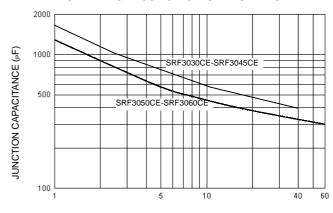
FORWARD VOLTAGE (Volts)

FIG-3 TYPICAL REVERSE CHARACTERISTICS



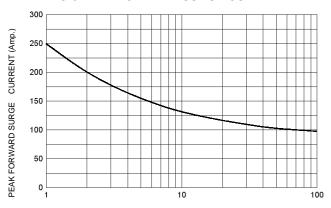
PERCENT OF RATED REVERSE VOLTAGE (%)

FIG-4 TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE (Volts)

FIG-5 PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60 Hz



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