

SRAF1030 thru SRAF1060

Switchmode Full Plastic Dual Schottky Barrier Power Rectifiers

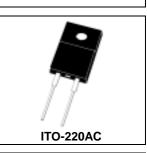
...Using the Schottky Barrier principle with a Molybdenum barrier metal. These state-of-the-art geometry features epitaxial construction with oxide passivation and metal overlay contact. Ideally suited for low voltage, high frequency rectification, or as free wheeling and polarity protection diodes.

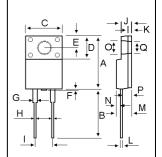
- * Low Forward Voltage.
- * Low Switching noise.
- * High Current Capacity
- * Guarantee Reverse Ávalanche.
- * Guard-Ring for Stress Protection.
- * Low Power Loss & High efficiency.
- * 125 Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction.
- * Plastic Material used Carries Underwriters Laboratory

Characteristic	Symbol	SRAF10					Unit	
		30	35	40	45	50	60	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	I _{F(AV)}	10				A		
Peak Repetitive Forward Current (Rate V _R , Square Wave, 20kHz)	I _{FM}	20				V		
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I _{FSM}	175				V		
Operating and Storage Junction Temperature Range	T _J , T _{STG}	-65 to +125						

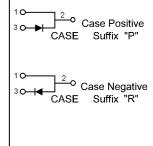
ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SRAF10						Unit
		30	35	40	45	50	60	Unit
Maximum Instantaneous Forward Voltage ($I_F = 10 \text{ Amp } T_C = 25$) ($I_F = 10 \text{ Amp } T_C = 125$)	V _F	0.55 0.48			65 57	V		
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25$) (Rated DC Voltage, $T_C = 125$)	I _R	1.0 50					mA	





DIM	MILLIMETERS				
DIVI	MIN	MAX			
А	15.05	15.15			
В	13.35	13.45			
С	10.00	10.10			
D	6.55	6.65			
E	2.65	2.75			
F		1.00			
G	1.15	1.25			
Н	0.55	0.65			
I	4.80	5.20			
J	3.00	3.20			
К	1.10	1.20			
L	0.55	0.65			
Μ	4.40	4.60			
Ν	1.15	1.25			
Ρ	2.65	2.75			
0	3.35	3.45			
Q	3.15	3.25			

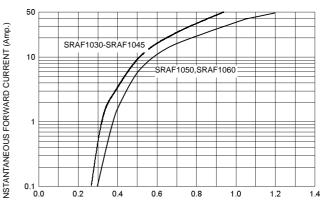




10 AMPERES 30-60 VOLTS

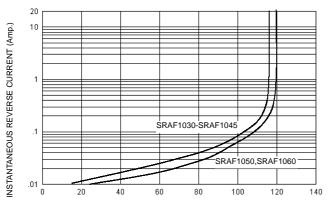
FIG-1 FORWARD CURRENT DERATING CURVE 10 AVERAGE FORWARD RECTIFIED CURRENT (Amp.) 8 6 4 2 0 ∟ 0 25 50 75 100 125 150 CASE TEMPERATURE ()

FIG-2 TYPICAL FORWARD CHARACTERISITICS

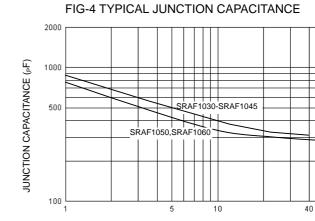


FORWARD VOLTAGE (Volts)

FIG-3 TYPICAL REVERSE CHARACTERISTICS

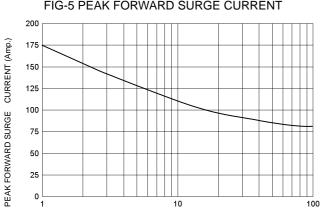


PERCENT OF RATED REVERSE VOLTAGE (%)



REVERSE VOLTAGE (Volts)

60



NUMBER OF CYCLES AT 60 Hz

FIG-5 PEAK FORWARD SURGE CURRENT



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