

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.
- * 125 μ Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction.
- * Plastic Material used Carries Underwriters Laboratory

SCHOTTKY BARRIER RECTIFIERS

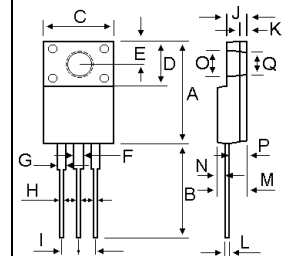
**30 AMPERES
70-100 VOLTS**



ITO-220AB

MAXIMUM RATINGS

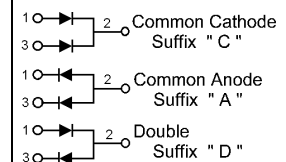
Characteristic	Symbol	SRF30				Unit
		70	80	90	100	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	70	80	90	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	49	56	63	70	V
Average Rectifier Forward Current Total Device (Rated V_R), $T_C=100\mu$	$I_{F(AV)}$	15 30				A
Peak Repetitive Forward Current (Rate V_R , Square Wave, 20kHz)	I_{FM}	30				A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfwave, single phase, 60Hz)	I_{FSM}	250				A
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-65 to +125				μ



DIM	MILLIMETERS	
	MIN	MAX
A	15.05	15.15
B	13.35	13.45
C	10.00	10.10
D	6.55	6.65
E	2.65	2.75
F	1.55	1.65
G	1.15	1.25
H	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
P	2.65	2.75
O	3.35	3.45
Q	3.15	3.25

ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SRF30				Unit
		70	80	90	100	
Maximum Instantaneous Forward Voltage ($I_F=15$ Amp $T_C=25\mu$) ($I_F=15$ Amp $T_C=125\mu$)	V_F	0.75 0.68		0.85 0.72		V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C=25\mu$) (Rated DC Voltage, $T_C=125\mu$)	I_R	1.0 30				mA



SRF3070-SRF30100

FIG-1 FORWARD CURRENT DERATING CURVE

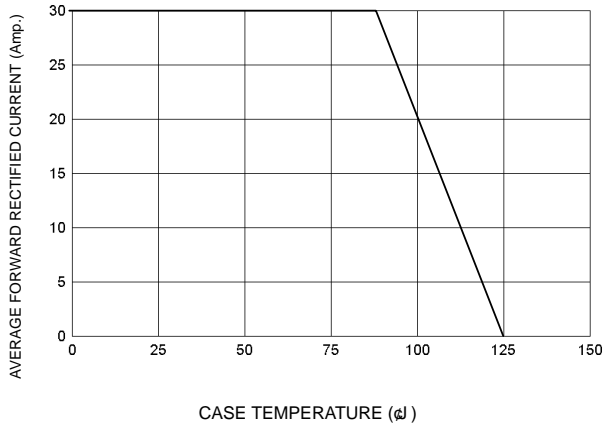


FIG-2 TYPICAL FORWARD CHARACTERISTICS

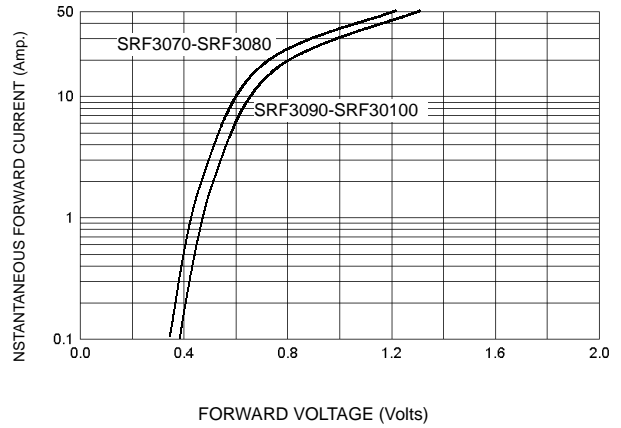


FIG-3 TYPICAL REVERSE CHARACTERISTICS

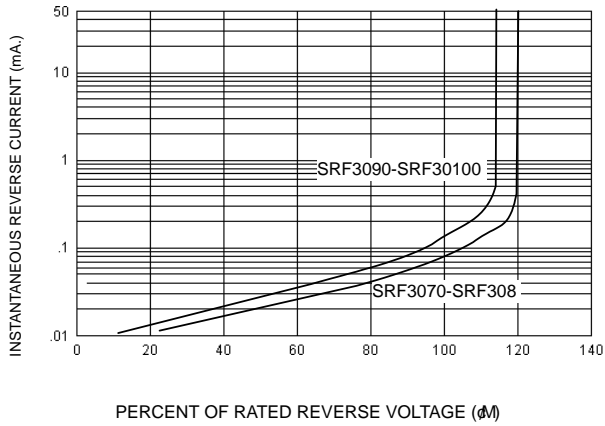


FIG-4 TYPICAL JUNCTION CAPACITANCE

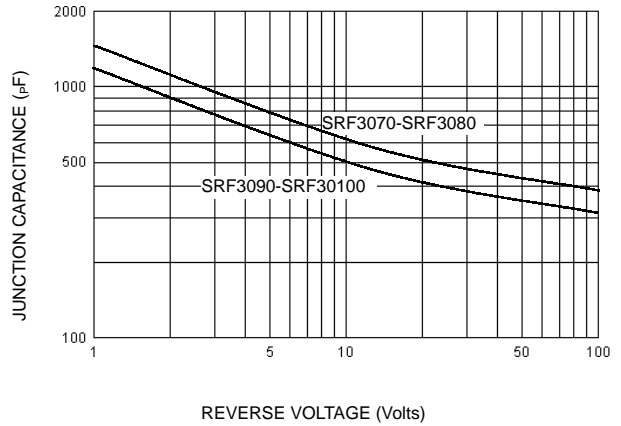


FIG-5 PEAK FORWARD SURGE CURRENT

