

## 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

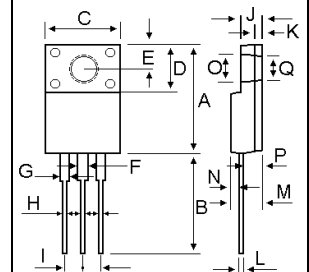
**30 AMPERES  
120 VOLTS**



**ITO-220AB**

### MAXIMUM RATINGS

Characteristic	Symbol	SRF30120C	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 $V_R$ , $T_C=100$ )	$I_{F(AV)}$	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 +150	



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	SRF30120C	Unit
Maximum Instantaneous Forward Voltage ( $I_F=15$ Amp $T_C=25$ ) ( $I_F=15$ Amp $T_C=125$ )	$V_F$	0.85 0.72	V
Maximum Instantaneous Reverse Current ( Rated DC Voltage, $T_C=25$ ) ( Rated DC Voltage, $T_C=125$ )	$I_R$	0.5 30	mA



Common cathode  
Suffix "C"

# SRF30120C

FIG-1 FORWARD CURRENT DERATING CURVE

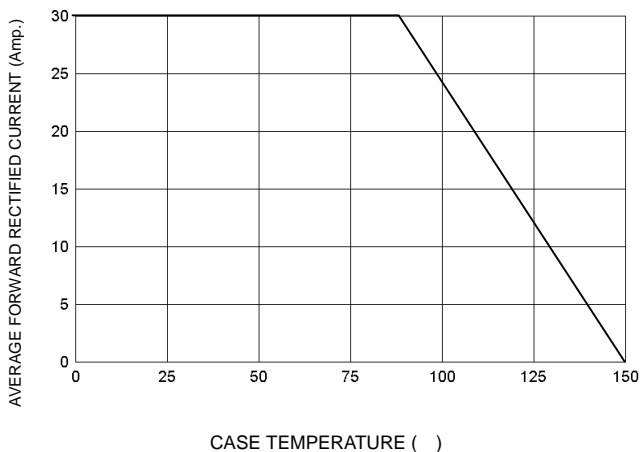


FIG-2 TYPICAL FORWARD CHARACTERISTICS

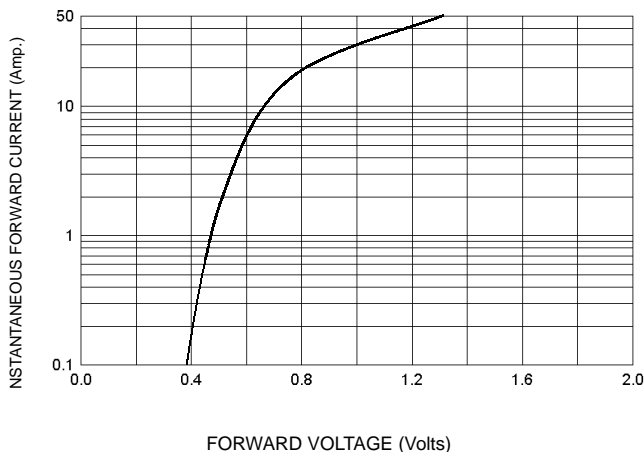


FIG-3 TYPICAL REVERSE CHARACTERISTICS

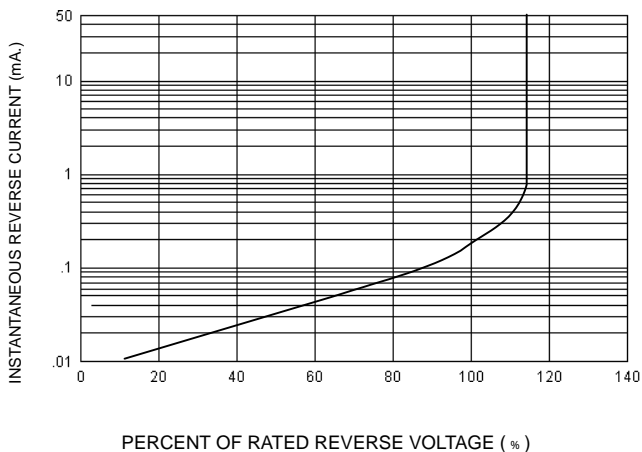


FIG-4 TYPICAL JUNCTION CAPACITANCE

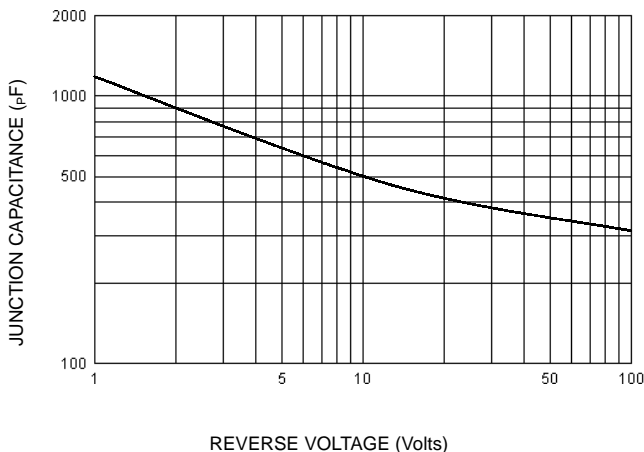


FIG-5 PEAK FORWARD SURGE CURRENT

