

### 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.

#### Features

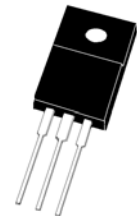
- \* Low Forward Voltage.
- \* Low Switching noise.
- \* High Current Capacity
- \* Guarantee Reverse Avalanche.
- \* Guard-Ring for Stress Protection.
- \* Low Power Loss & High efficiency.
- \* 150°C Operating Junction Temperature
- \* Low Stored Charge Majority Carrier Conduction.
- \* Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O



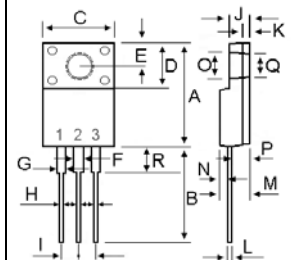
\* In compliance with EU RoHs 2002/95/EC directives

#### SCHOTTKY BARRIER RECTIFIERS

**20 AMPERES  
70-100 VOLTS**



ITO-220AB



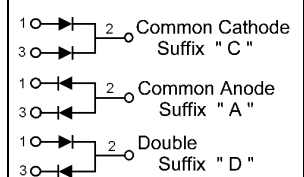
#### MAXIMUM RATINGS

Characteristic	Symbol	SRF20				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 ( per diode ) Total Device (Rated $V_R$ ), $T_C=100^\circ\text{C}$	$I_{F(AV)}$	10 20				A
Peak Repetitive Forward Current (Rate $V_R$ , Square Wave, 20kHz)	$I_{FM}$	20				A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	$I_{FSM}$	200				A
Operating and Storage Junction Temperature Range	$T_J, T_{STG}$	-65 to +150				°C

#### ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SRF20				Unit
		70	80	90	100	
Maximum Instantaneous Forward Voltage ( I <sub>F</sub> =10 Amp T <sub>C</sub> = 25°C) ( I <sub>F</sub> =10 Amp T <sub>C</sub> = 125°C)	V <sub>F</sub>	0.75 0.68		0.85 0.78		V
Maximum Instantaneous Reverse Current ( Rated DC Voltage, T <sub>C</sub> = 25°C) ( Rated DC Voltage, T <sub>C</sub> = 125°C)	I <sub>R</sub>	0.2 30				mA

DIM	MILLIMETERS	
	MIN	MAX
A	14.90	15.15
B	13.35	13.55
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
O	3.35	3.45
P	2.65	2.75
Q	3.15	3.25
R	3.60	3.80



# SRF2070 Thru SRF20100

FIG-1 FORWARD CURRENT DERATING CURVE

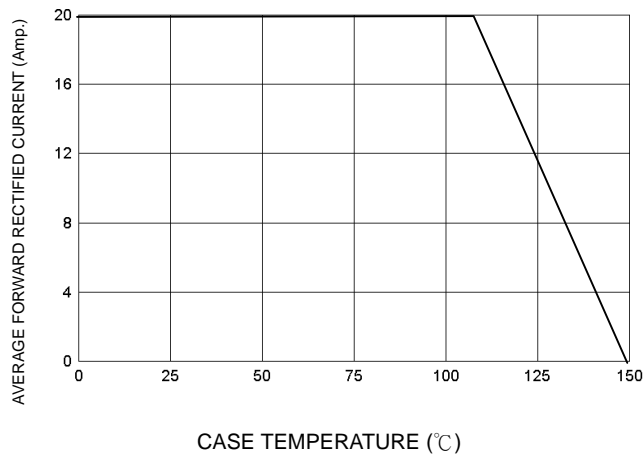


FIG-2 TYPICAL FORWARD CHARACTERISTICS

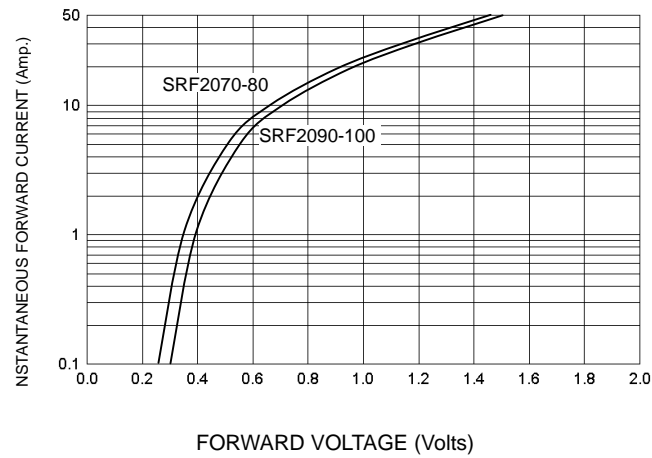


FIG-3 TYPICAL REVERSE CHARACTERISTICS

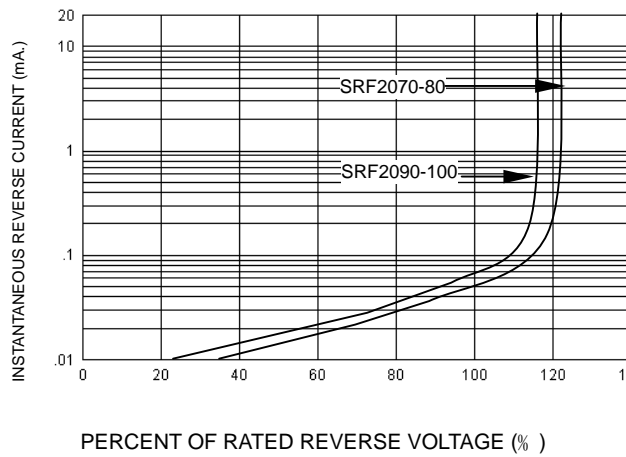


FIG-4 TYPICAL JUNCTION CAPACITANCE

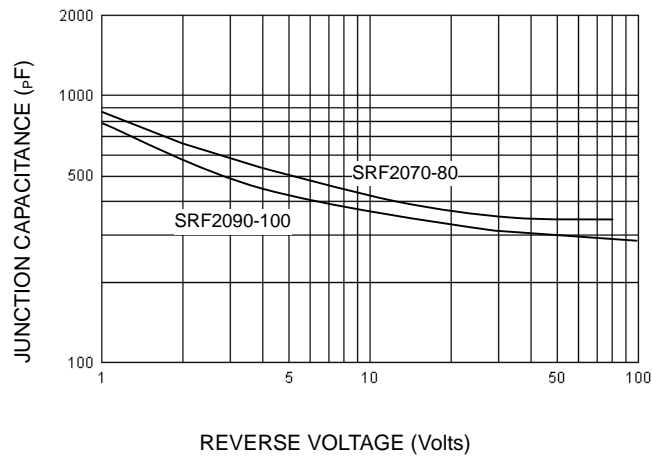
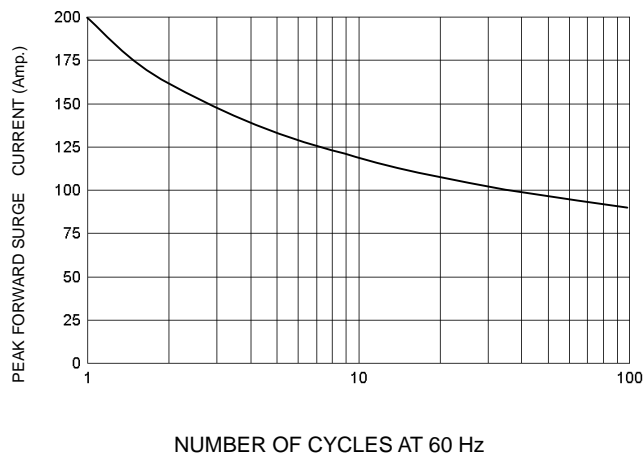


FIG-5 PEAK FORWARD SURGE CURRENT



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