

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

#### Mecanical Data

- \* Case :JEDEC ITO-220AB molded plastic body
- \* Termals:Plated lead,solderable per MIL-STD-750, Method 2026
- \* Polarity:As marked
- \* Mounting Torqure: 4-6kg.cm
- \* Weight:1.7 g approx.

Plating pb free is indicated by box

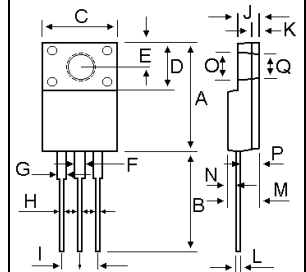


#### SCHOTTKY BARRIER RECTIFIERS

**10 AMPERES  
70-100 VOLTS**



**ITO-220AB**



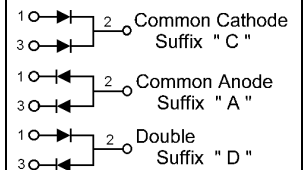
DIM	MILLIMETERS	
	MIN	MAX
A	15.05	15.15
B	13.35	13.45
C	10.00	10.10
D	6.55	6.65
E	2.65	2.75
F	1.55	1.65
G	1.15	1.25
H	0.55	0.65
I	2.50	2.60
J	3.00	3.20
K	1.10	1.20
L	0.55	0.65
M	4.40	4.60
N	1.15	1.25
P	2.65	2.75
O	3.35	3.45
Q	3.15	3.25

#### MAXIMUM RATINGS

Characteristic	Symbol	SRF10				Unit
		70	80	90	100	
Peak Repetitive Reverse Voltage	$V_{RRM}$					V
Working Peak Reverse Voltage	$V_{RWM}$	70	80	90	100	
DC Blocking Voltage	$V_R$					
RMS Reverse Voltage	$V_{R(RMS)}$	49	56	63	70	V
Average Rectifier Forward Current	$I_{F(AV)}$	5.0				A
Total Device (Rated $V_R$ ), $T_C=100$		10				
Peak Repetitive Forward Current	$I_{FM}$	10				A
(Rate $V_R$ , Square Wave, 20kHz)						
Non-Repetitive Peak Surge Current	$I_{FSM}$	125				A
(Surge applied at rate load conditions halfware, single phase, 60Hz)						
Operating and Storage Junction Temperature Range	$T_J, T_{STG}$	-65 to +125				

#### ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SRF10				Unit
		70	80	90	100	
Maximum Instantaneous Forward Voltage ( $I_F=5$ Amp $T_C=25$ ) ( $I_F=5$ Amp $T_C=125$ )	$V_F$	0.75		0.85		V
		0.66		0.78		
Maximum Instantaneous Reverse Current ( Rated DC Voltage, $T_C=25$ ) ( Rated DC Voltage, $T_C=125$ )	$I_R$		0.5			mA
			20			
Typical Thermal Resistance junction to case	$R_{\theta jc}$	5.5				/w



# SRF1070 Thru SRF10100

FIG-1 FORWARD CURRENT DERATING CURVE

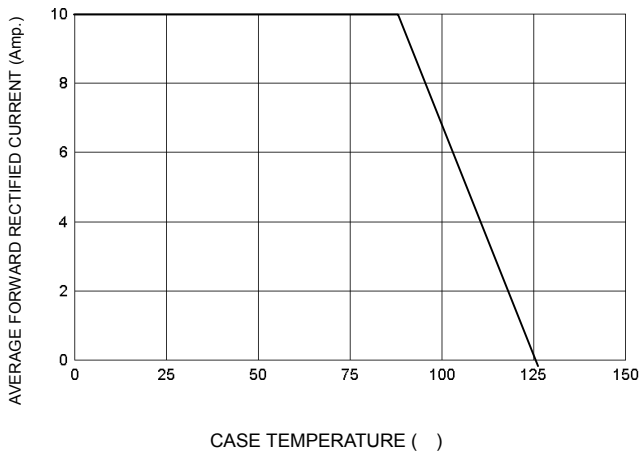


FIG-2 TYPICAL FORWARD CHARACTERISTICS

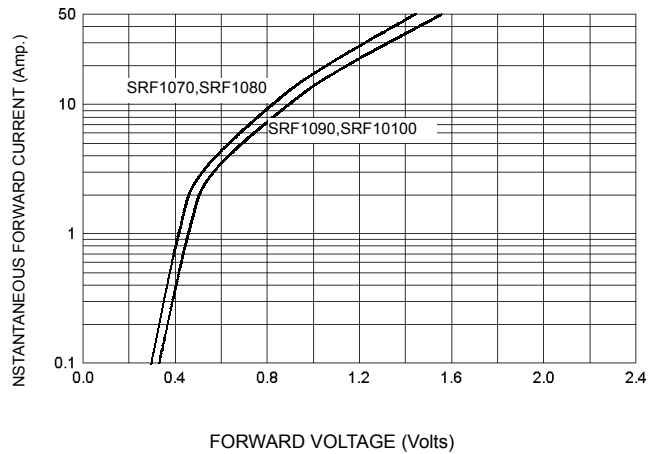


FIG-3 TYPICAL REVERSE CHARACTERISTICS

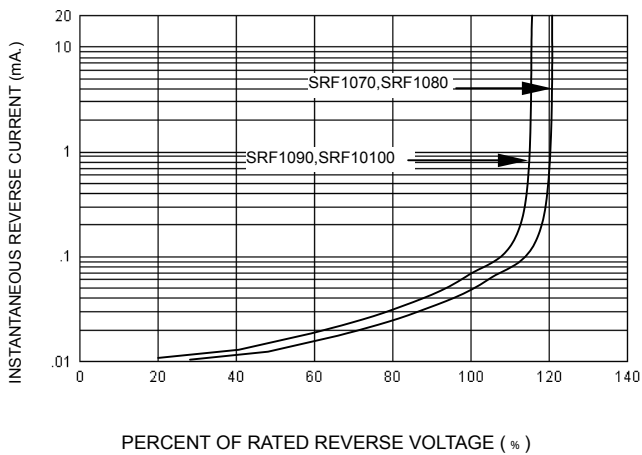


FIG-4 TYPICAL JUNCTION CAPACITANCE

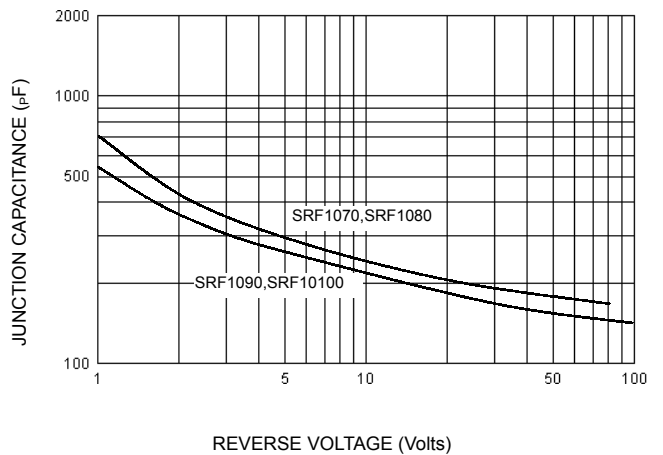
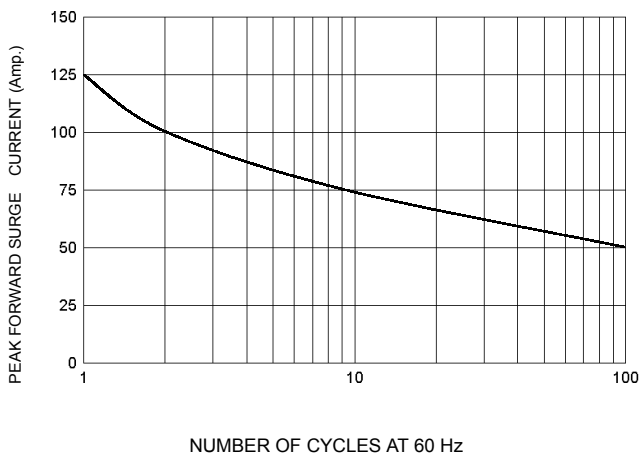


FIG-5 PEAK FORWARD SURGE CURRENT



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