

## 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.

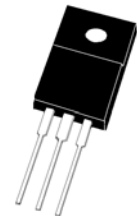
### Features

- \* 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
- \* *Pb free*
- \* *In compliance with EU RoHs directives*



### SCHOTTKY BARRIER RECTIFIERS

**30 AMPERES  
60 VOLTS**



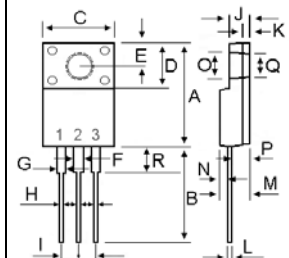
ITO-220AB

### MAXIMUM RATINGS

Characteristic	Symbol	SRF3060C	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	60	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Average Rectifier Forward Current ( Per dioed )	$I_{F(AV)}$	15	A
Total Device (Rated $V_R$ ), $T_C=100^\circ\text{C}$		30	
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 halfware, single phase, 60Hz)	$I_{FSM}$	250	A
Operating and Storage Junction Temperature Range	$T_J, T_{STG}$	-65 to +150	°C

### ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage ( $I_F=15$ Amp $T_C=25^\circ\text{C}$ )	$V_F$	---	0.63	0.70	V
( $I_F=15$ Amp $T_C=125^\circ\text{C}$ )		---	0.58	---	
Maximum Instantaneous Reverse Current ( Rated DC Voltage, $T_C=25^\circ\text{C}$ )	$I_R$	---	0.03	0.5	mA
( Rated DC Voltage, $T_C=125^\circ\text{C}$ )		---	30	---	
Typical Thermal Resistance junction to case	$R_{\theta jc}$	3.0			°C/w



DIM	MILLIMETERS	
	MIN	MAX
A	14.80	16.10
B	12.65	13.80
C	9.85	10.36
D	4.60	6.80
E	2.50	3.50
F	1.00	1.45
G	1.00	1.45
H	0.30	0.90
I	2.40	2.70
J	2.34	3.30
K	0.55	1.30
L	0.36	0.80
M	4.20	4.90
N	1.10	1.80
O	2.90	3.50
P	2.50	3.15
Q	2.90	3.50
R	3.10	4.85

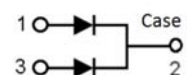


FIG-1 FORWARD CURRENT DERATING CURVE

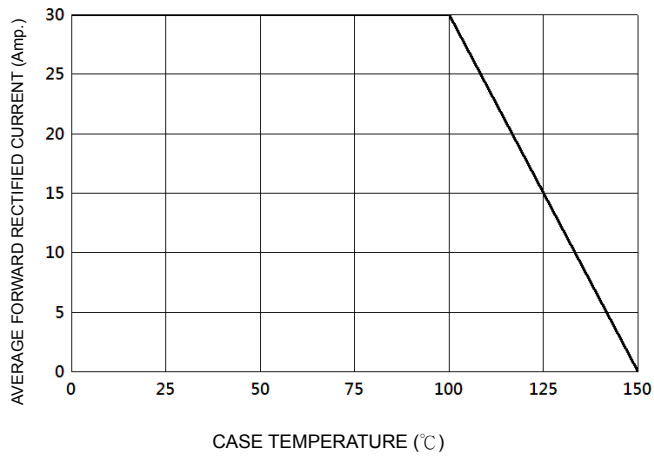


FIG-2 TYPICAL FORWARD CHARACTERISTICS

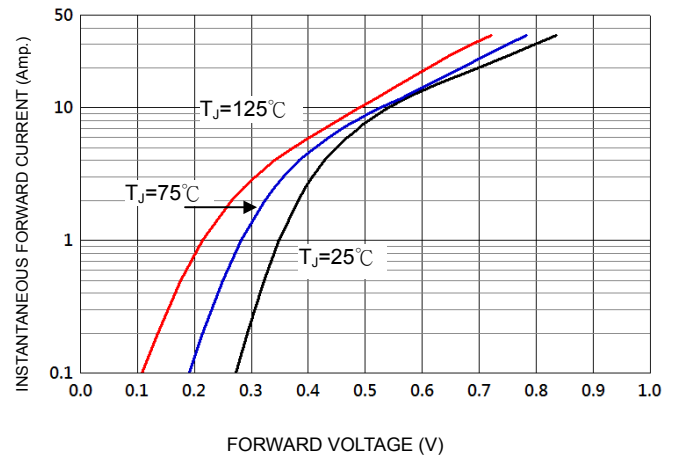


FIG-3 TYPICAL REVERSE CHARACTERISTICS

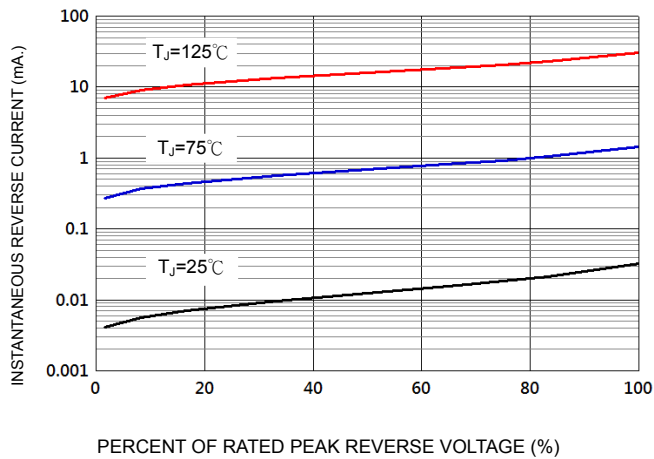


FIG-4 TYPICAL JUNCTION CAPACITANCE

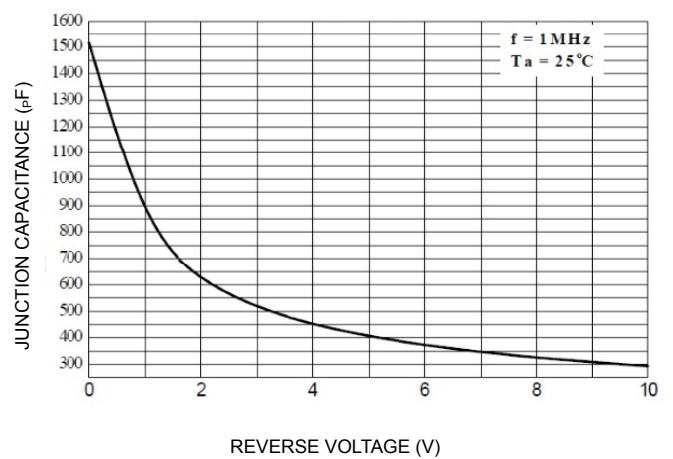
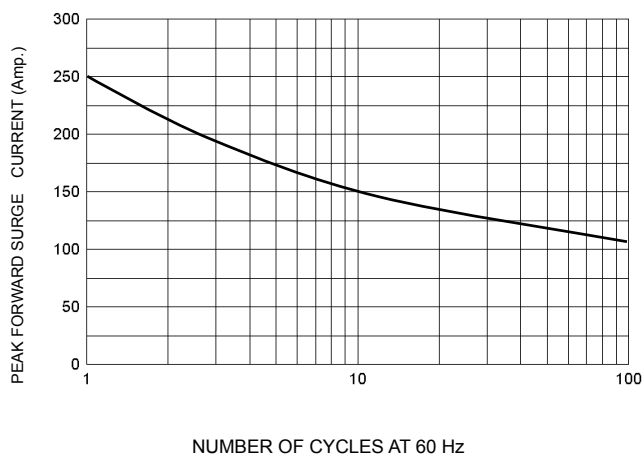


FIG-5 PEAK FORWARD SURGE CURRENT



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