

Switchmode Full Plastic Dual Schottky Barrier Power Rectifiers

Using the Schottky Barrier principle with a refractory metal capable of high temperature operation metal. The proprietary barrier technology allows for reliable operation up to 175°C junction temperature. Typical applications are in switching mode power supplies such as adaptors, DC/DC converters, free-wheeling and polarity protection diodes.

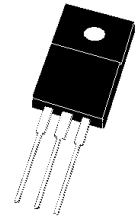
Features.

- * Low Forward Voltage.
- * Low Switching noise.
- * High Current Capacity
- * Guarantee Reverse Avalanche.
- * Guard-Ring for Stress Protection.
- * Low Power Loss & High efficiency.
- * High 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

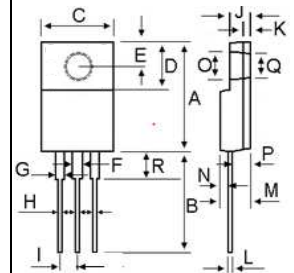


SCHOTTKY BARRIER RECTIFIERS

**20 AMPERES
150 VOLTS**



ITO-220AB



DIM	MILLIMETERS	
	MIN	MAX
A	14.80	16.10
B	12.65	14.40
C	9.70	10.36
D	4.60	6.80
E	2.50	3.50
F	0.90	1.45
G	0.90	1.45
H	0.50	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	2.30	3.15
Q	2.90	3.50
R	2.80	4.85

MAXIMUM RATINGS

Characteristic	Symbol	MBREF20150C	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	150	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	105	V
Average Rectifier Forward Current (per diode)	$I_{F(AV)}$	10	A
Total Device (Rated V_R)		20	
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 half-wave, single phase, 60Hz)	I_{FSM}	150	A
Operating Junction and Storage Temperature Range	T_J, T_{stg}	-65 to +175	°C

THERMAL RESISTANCES

Typical Thermal Resistance junction to case	$R_{\theta jc}$	3.6	°C/w
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ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage (per diode) ($I_F = 10$ Amp $T_C = 25^\circ C$) ($I_F = 10$ Amp $T_C = 125^\circ C$)	V_F	---	0.84 0.70	0.95 ---	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ C$) (Rated DC Voltage, $T_C = 125^\circ C$)	I_R	---	1 2	10 ---	μA mA

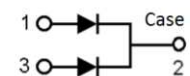


FIG-1 FORWARD CURRENT DERATING CURVE

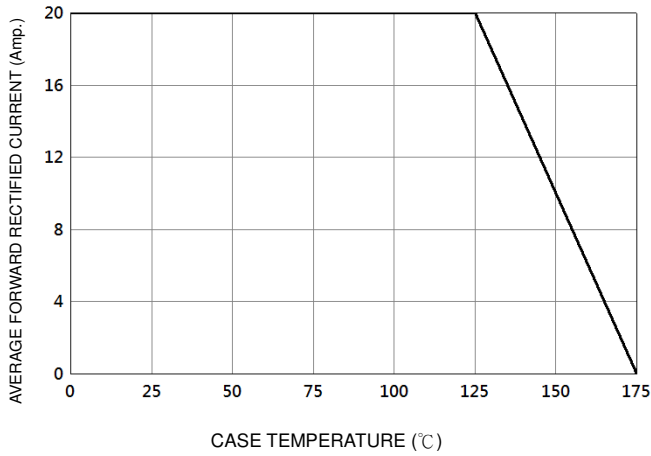


FIG-2 TYPICAL FORWARD CHARACTERISTICS

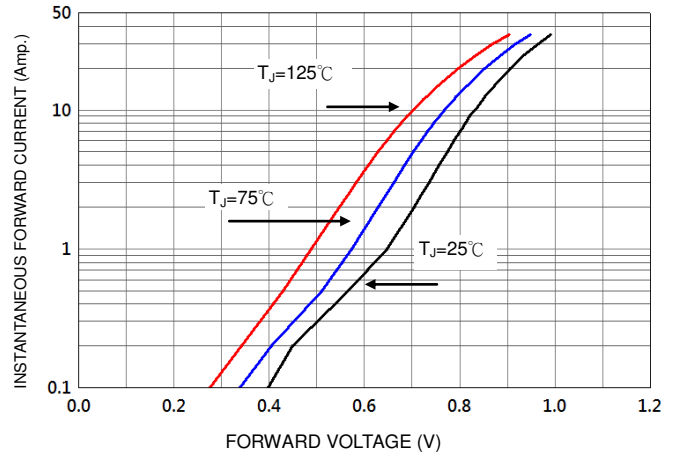


FIG-3 TYPICAL REVERSE CHARACTERISTICS

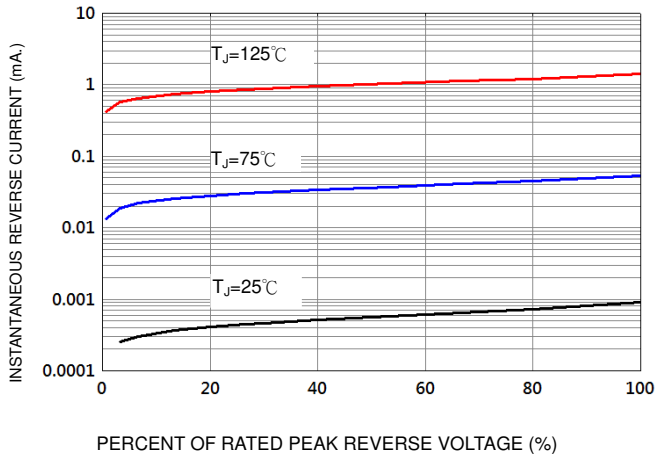


FIG-4 TYPICAL JUNCTION CAPACITANCE

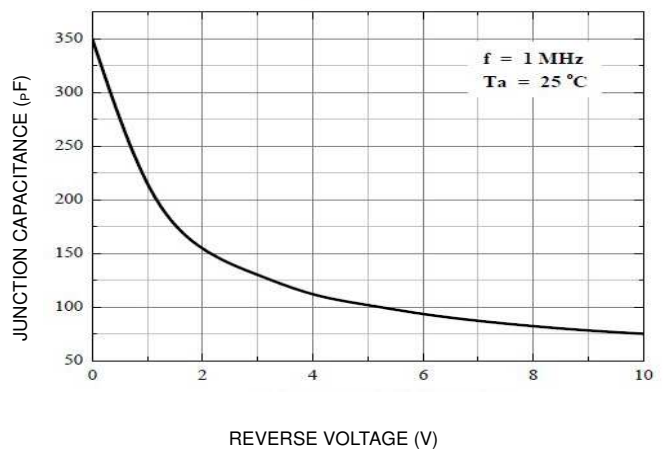
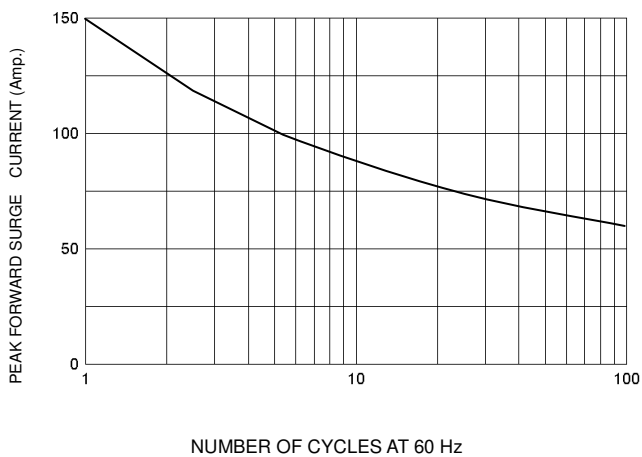


FIG-5 PEAK FORWARD SURGE CURRENT



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