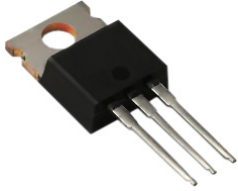


Schottky Barrier Rectifier



Features:

- Schottky barrier chip
- Guard ring for over voltage protection
- Low power loss, high efficiency
- Low reverse leakage current
- High surge current capability
- Plastic material has UL flammability classification 94V-0

Mechanical Data:

Case	: ITO-220AB Type, molded plastic
Terminals	: Pure tin plated, lead free solderable per MIL-STD-750, method 2026
Polarity	: As marked on the body
Weight	: 1.8 grams (approx.)
Mounting Position	: Any
Reverse Voltage	: 45 Volts
Forward Current	: 30 Amperes

Typical Applications:

For use in low voltage, high frequency inverters mode power supplies, freewheeling diode and polarity protection application.

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	Values	Unit
Max. Recurrent Peak Reverse Voltage	V _{RRM}	45	V
Max. RMS Voltage	V _{RMS}	31.5	
Max. DC Blocking Voltage	V _{DC}	45	
Max. Average Forward Rectified Current	I _{F(AV)}	30	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	200	
Max. Forward Voltage at 15A per leg	V _F	0.7	V
Max. DC Reverse Current Rated DC Blocking Voltage	I _R	0.1 20	mA
Typical Thermal Resistance, Junction to Case	R _{θJC}	3.5	°C/W
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Notes:

1. Mounted on 14mm × 14mm pad areas, 1oz. FR4 P.C.B.
2. Free air, mounted on recommended copper pad area.
3. Pulse test: 300us pulse width, 1% duty cycle.
4. Pulse test: Pulse width ≤ 40ms
5. The typical data above is for reference only

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Ratings and Characteristic Curves

Fig 1. Forward Current Derating Curve

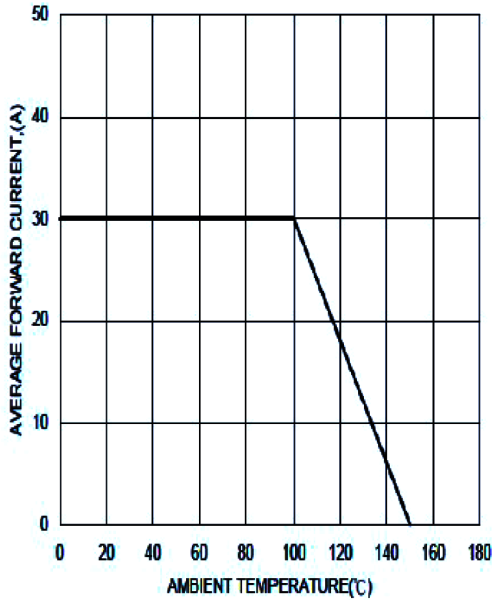


Fig 2. Typical Instantaneous Forward Characteristic

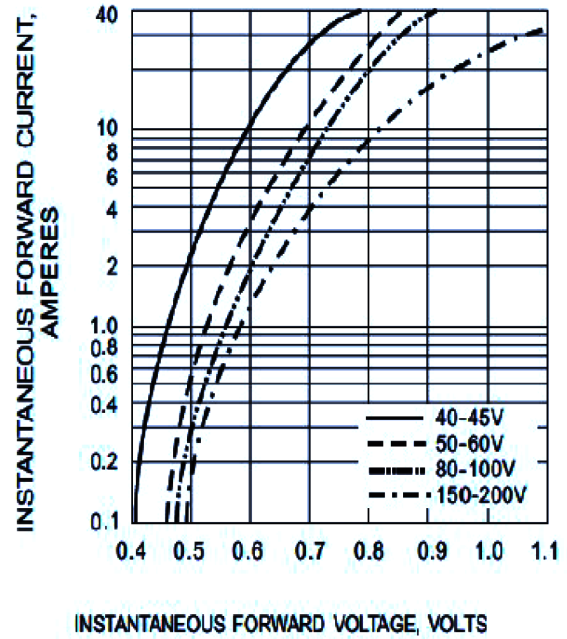


Fig 3. Typical Reverse Characteristics

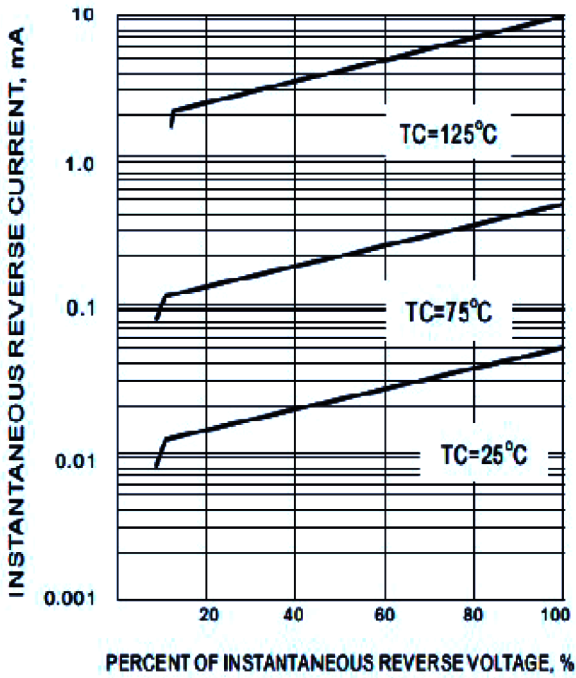
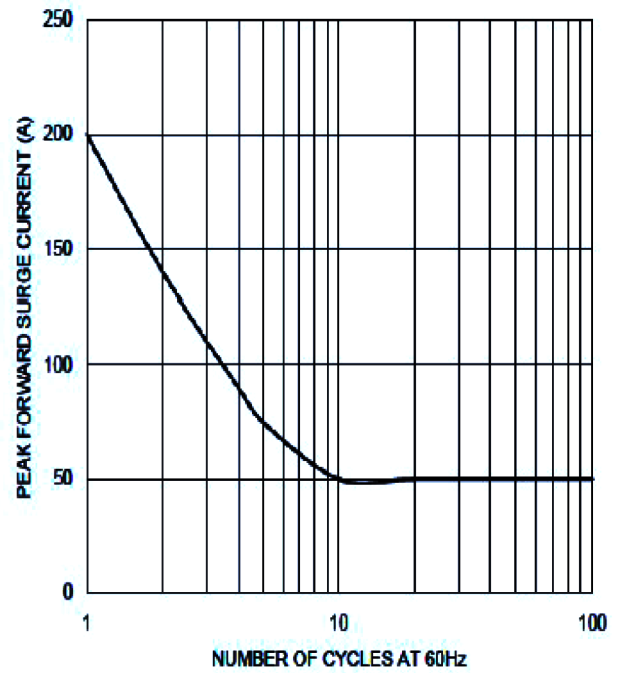


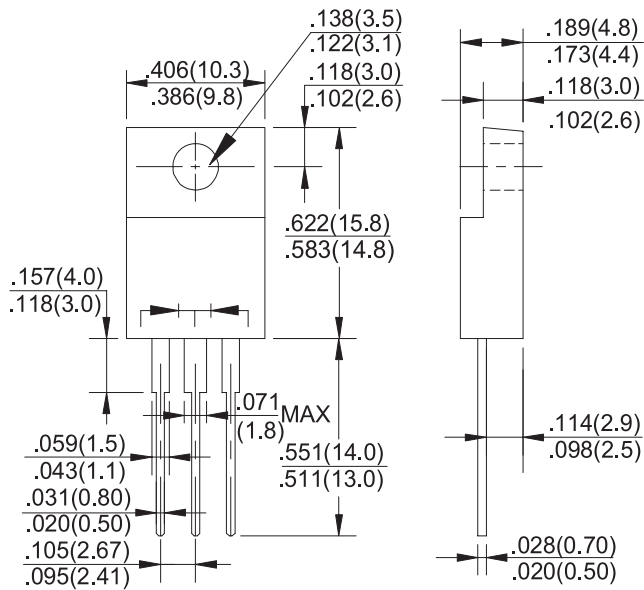
Fig 4. Max. Non-Repetitive Surge Current



Schottky Barrier Rectifier

Dimensions:

ITO-220AB



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Schottky Barrier Rectifier	MBRF3045CT

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