

Superfast Recovery Rectifier

RoHS
Compliant



Features:

- Schottky barrier chip
- Guard ring for over voltage protection
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability
- Plastic package has UL flammability classification 94V-0

Mechanical Data:

Case	: TO-220AC molded plastic
Terminals	: Pure tin plated, lead solderable per MIL-STD-750, method 2026
Polarity	: As marked on the body
Weight	: 2.1 grams
Mounting Position	: Any
Reverse Voltage	: 150 Volts
Forward Current	: 10 Amperes

Typical Applications

For use in high frequency rectifier of switching mode power supplies, Freewheeling Diode, DC/DC converters or polarity protection application

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz.

For capacitive load, derate current by 20%.

Characteristics	Symbol	Values	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Max. RMS Voltage	V_{RMS}	105	
Max. DC Blocking Voltage	V_{DC}	150	
Max. Average Forward	$I(AV)$	10	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	150	
Max. Forward Voltage at 10A per leg	V_F	0.92	
Max. DC Reverse Current at $T_J = 25^\circ C$ Rated DC Blocking Voltage at $T_J = 125^\circ C$	I_R	0.05 20	mA
Typical Thermal Resistance	$R_{\theta JC}$	2.2	$^\circ C/W$
Operating Temperature Range	T_J	-65 to +150	$^\circ C$
Storage Temperature Range	T_{STG}		

Note:

1. The typical data above is for reference only.

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Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

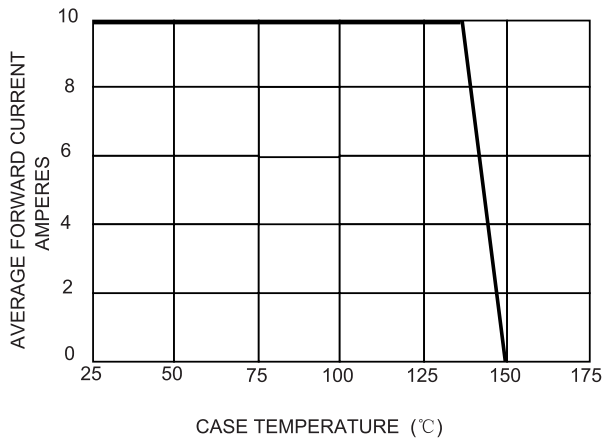


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

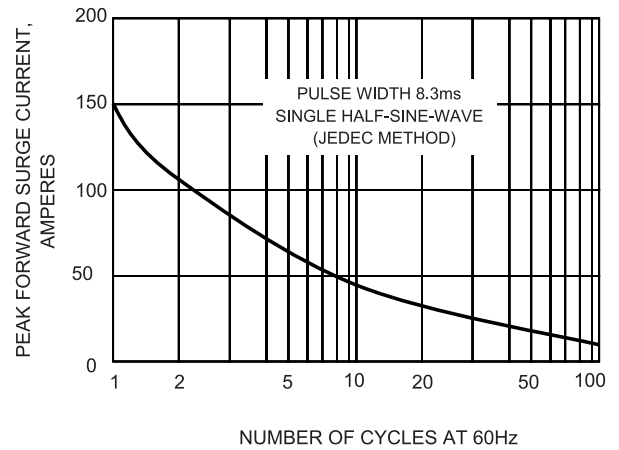


FIG.3-TYPICAL REVERSE CHARACTERISTICS

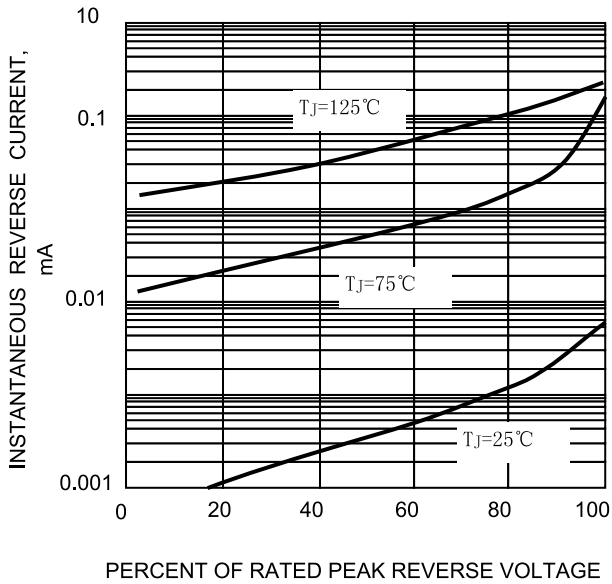
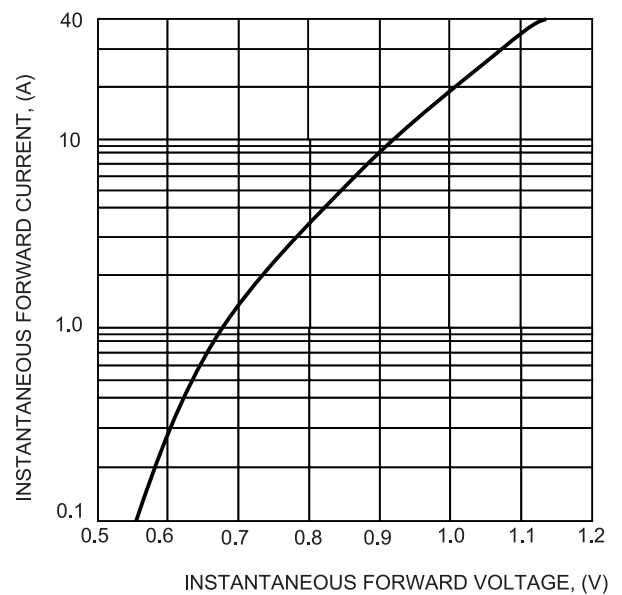


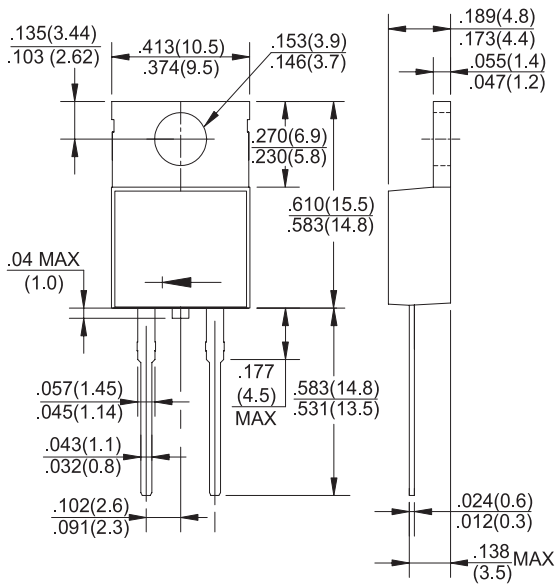
FIG.4-TYPICAL FORWARD CHARACTERISTICS



Superfast Recovery Rectifier

Dimensions:

TO-220AC



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Superfast Recovery Rectifier	MBR10150+

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