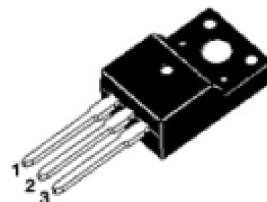


10.0A SCHOTTKY BARRIER DIODE

Features

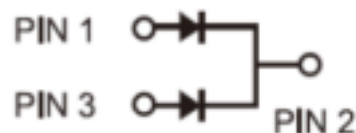
- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 1 5 0A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

- Case: TO-220F, Molded Plastic
- Terminals: Plated Leads Solderable per STD-202, Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 11.5 cm·kg (10 in·lbs) Max.
- MARKING: MBR10150CTF

TO-220F



Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	MBR10150CTF	Units
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)}	100	V
Average Rectified Output Current @T _L = 100°C (Note 1)	I _O	10.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150	A
Forward Voltage @I _F = 10A	V _{FM}	0.85	V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	0.5 50	mA
Typical Junction Capacitance (Note 2)	C _j	200	pF
Typical Thermal Resistance (Note 1)	R _{θJA}	2.0	°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	°C

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

FIG.1- FORWARD CURRENT DERATING CURVE

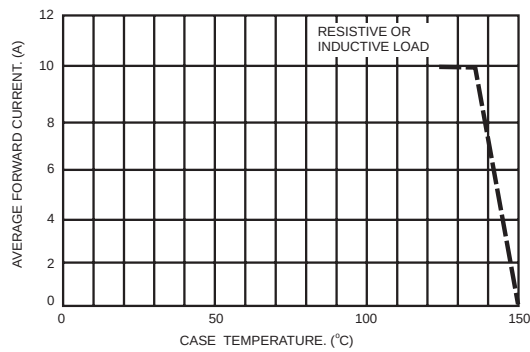


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

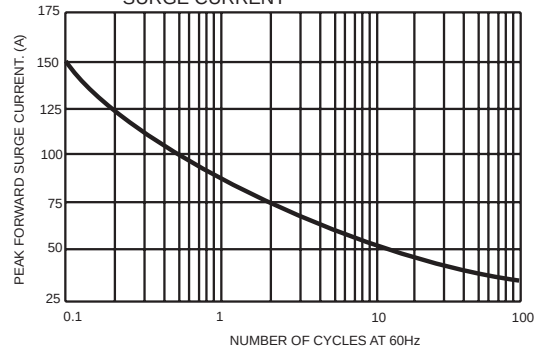


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

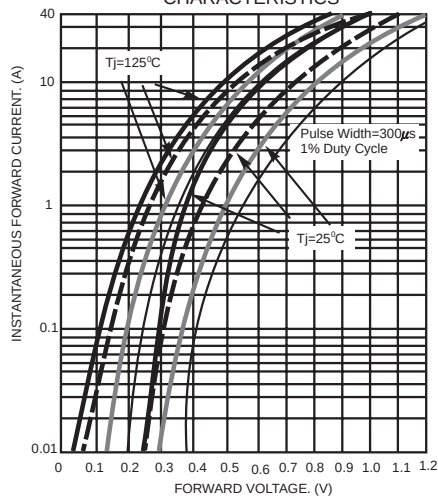


FIG.4- TYPICAL REVERSE CHARACTERISTICS

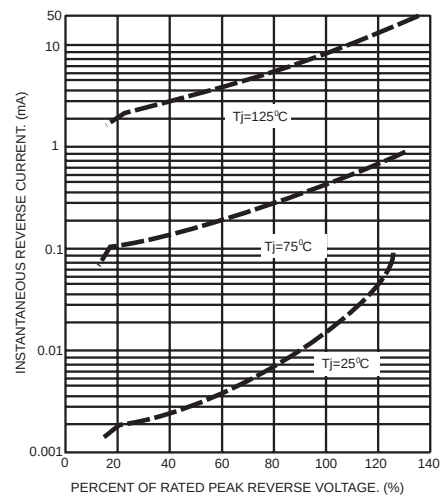


FIG.5- TYPICAL JUNCTION CAPACITANCE

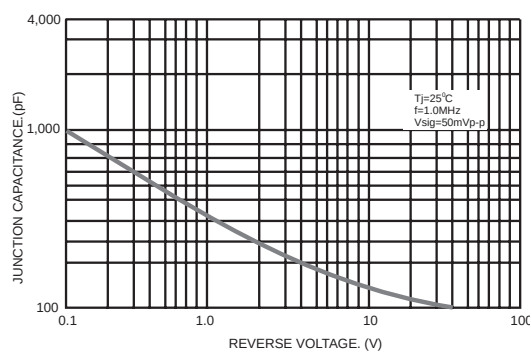
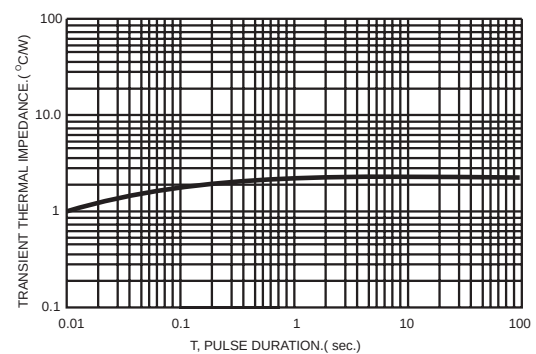
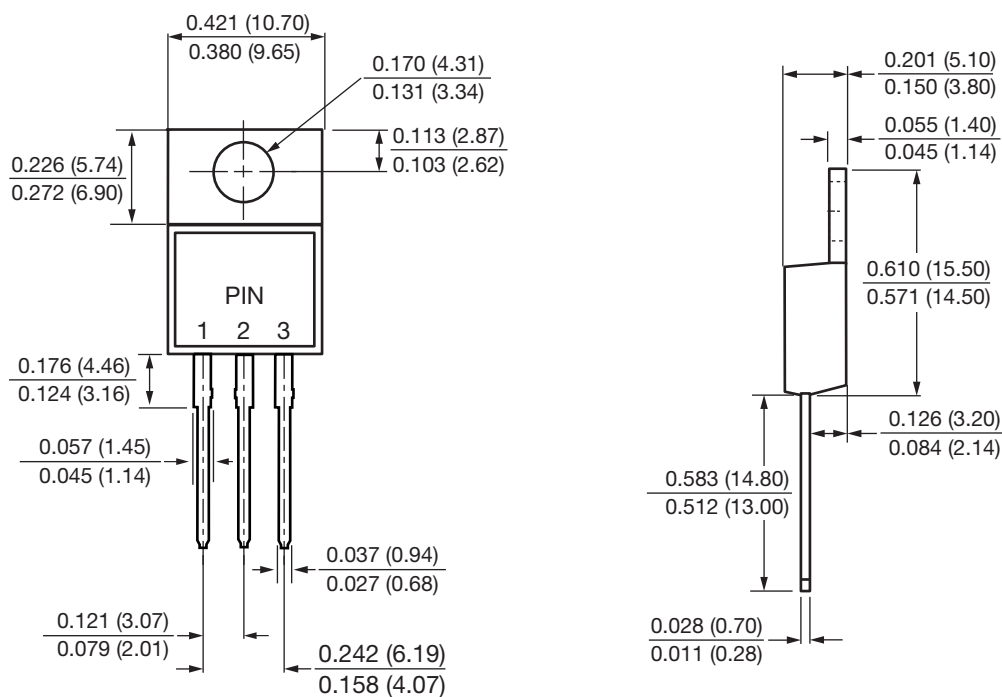


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTIC



Package Outline

TO-220F



Dimensions in inches and (millimeters)