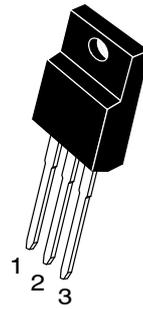


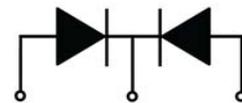


TO-220F



Features:

- High surge capacity
- Low Forward Voltage Drop.
- High Current Capability.
- Super Fast Switching Speed For High Efficiency



1. Anode 2. Cathode 3. Anode

Marking Diagram



Y = Year
 A = Assembly Location
 WW = Work Week
 MURF10XXA = Specific Device Code

Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	MUR F1010 ACTG	MUR F1015 ACTG	MUR F1020 ACTG	MUR F1040 ACTG	MUR F1060 ACTG	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	100	150	200	400	600	V
Working Peak Reverse Voltage	V _{RWM}	70	105	140	280	420	V
DC Blocking Voltage	V _{R(DC)}	100	150	200	400	600	V
Average Rectified Forward Current Total Device, (Rated V _R),	I _{F(AV)}			5			A
Per Leg Total Device				10			A
Peak Rectified Forward Current Per Diode Leg (Rated V _R , Square Wave, 20 kHz),	I _{FM}			10			A
Nonrepetitive Peak Surge Current(Surge applied at rated load conditions half wave, single phase, 60 Hz)	I _{FSM}			150			A
Operating Junction Temperature and Storage Temperature	T _J , T _{stg}			-55 to +150			°C
Maximum Thermal Resistance, Junction-to-Case(Per Leg)	R _{θJC}			2.0			°C/W

ELECTRICAL CHARACTERISTICS (Per Diode Leg)

Parameter	Symbol	MUR F1010 ACTG	MUR F1015 ACTG	MUR F1020 ACTG	MUR F1040 ACTG	MUR F1060 ACTG	Unit
Forward Voltage (Note 1) (I _F =5A, T _C = 25°C)	V _F	0.975			1.3	1.70	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, T _C = 25°C) (Rated DC Voltage, T _C = 150°C)	I _R			10 500			μA
Maximum Reverse Recovery Time (I _F = 0.5 A, I _R = 1.0 A, I _{REC} = 0.25 A)	T _{RR}			35			ns

Note 1.Pulse Test: Pulse Width = 300 μs, Duty Cycle ≤2.0%



Typical Characteristics

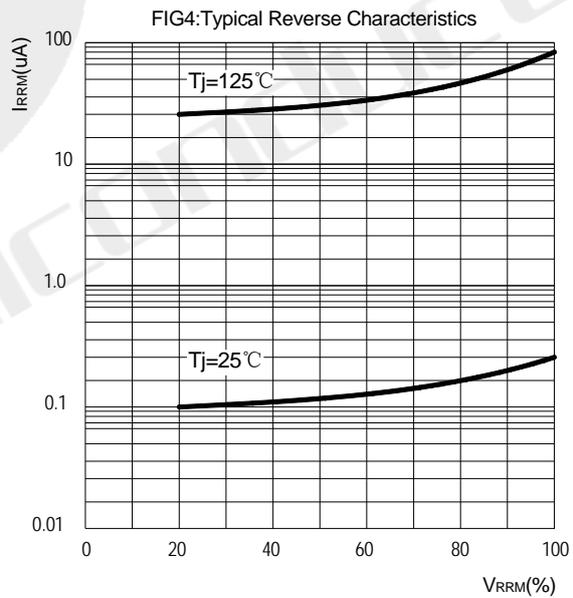
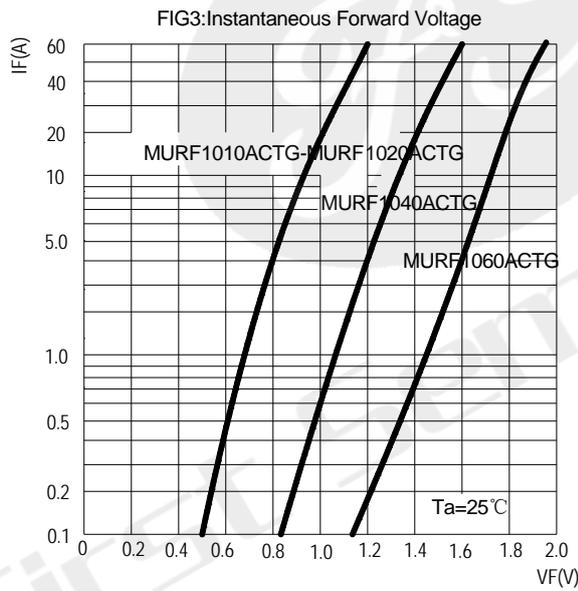
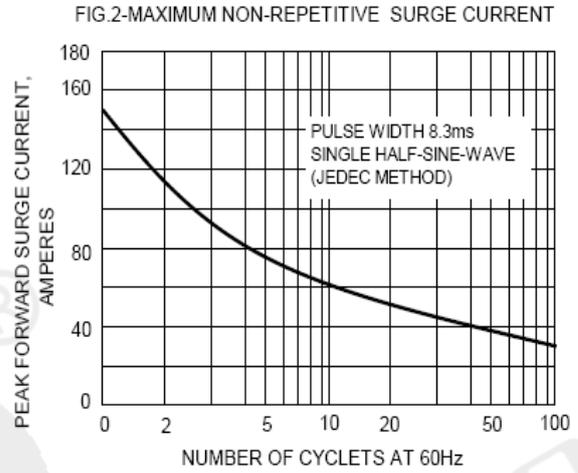
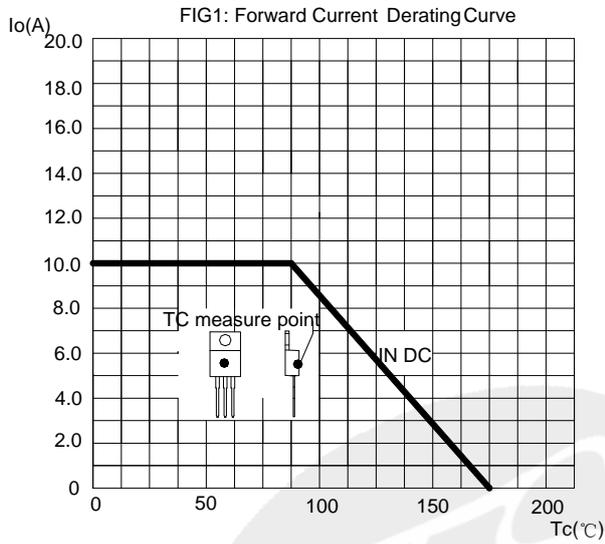
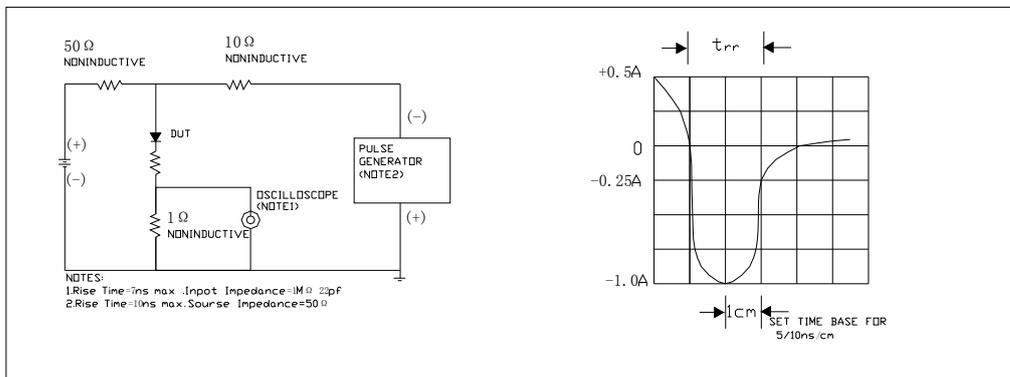


Diagram of circuit and Testing wave form of reverse recovery time

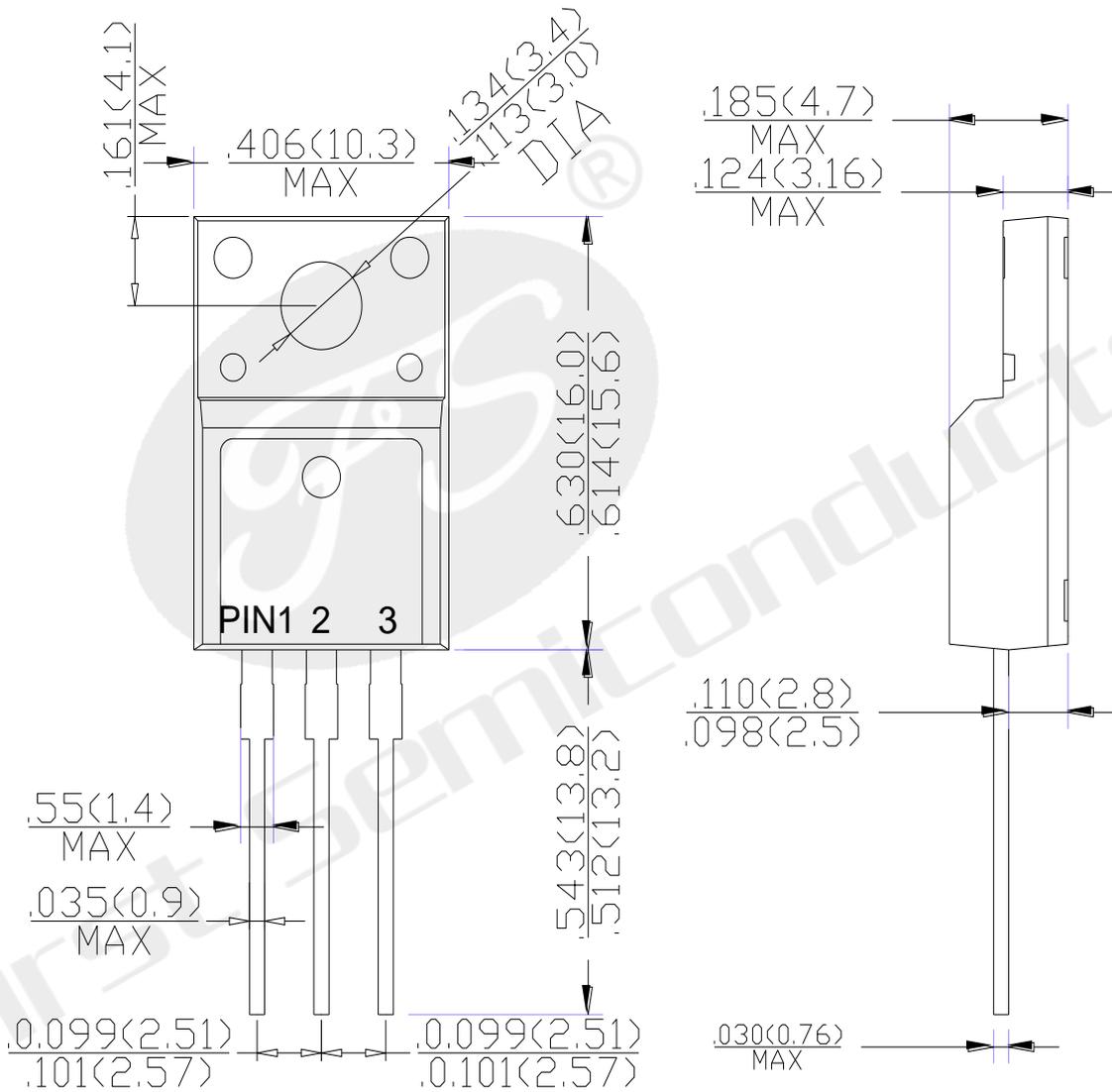




Package Dimension

TO-220F

Unit: mm





Declaration

- FIRST reserves the right to change the specifications, the same specifications of products due to different packaging line mold, the size of the appearance will be slightly different, shipped in kind, without notice! Customers should obtain the latest version information before ordering, and verify whether the relevant information is complete and up-to-date.
- Any semiconductor product under certain conditions has the possibility of failure or failure, The buyer has the responsibility to comply with safety standards and take safety measures when using FIRST products for system design and manufacturing, To avoid To avoid potential failure risks, which may cause personal injury or property damage!
- Product promotion endless, our company will wholeheartedly provide customers with better products!

ATTACHMENT

Revision History

Date	REV	Description	Page
2018.01.01	1.0	Initial release	