



MURF2005CTR-MURF2060CTR

Features:

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



TO-220F



1.Cathode 2.Anode 3. Cathode

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

Parameter	Symbol	MURF 2005CTR	MURF 2010CTR	MURF 2015CTR	MURF 2020CTR	MURF 2030CTR	MURF 2040CTR	MURF 2060CTR	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	50	100	150	200	300	400	600	V
Average Rectified Forward Current Total Device, (Rated V_F),	$I_{F(AV)}$	20							A
Nonrepetitive Peak Surge Current(Surge applied at rated load conditions half wave, single phase, 60 Hz)	I_{FSM}	200							A
Operating Junction Temperature and Storage Temperature	T_J, T_{stg}	-55 to +150							°C
Maximum Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	3.0				2.0			°C/W

ELECTRICAL CHARACTERISTICS(per Leg)

Parameter	Symbol	MURF 2005CTR	MURF 2010CTR	MURF 2015CTR	MURF 2020CTR	MURF 2030CTR	MURF 2040CTR	MURF 2060CTR	Unit
Forward Voltage (I _F = 10A, T _C = 25°C) (Note 1) (I _F = 10 A, T _C = 125°C)	V _F	0.975 0.895				1.30 1.10		1.70 1.50	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, T _C = 25°C) (Rated DC Voltage, T _C = 125°C)	I _R	5 250				10 500			μ A
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 $\leq 2.0\%$

Typical Characteristics

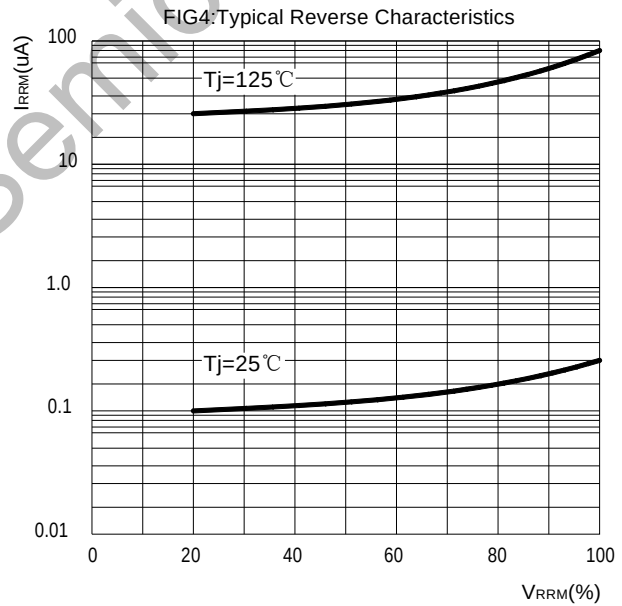
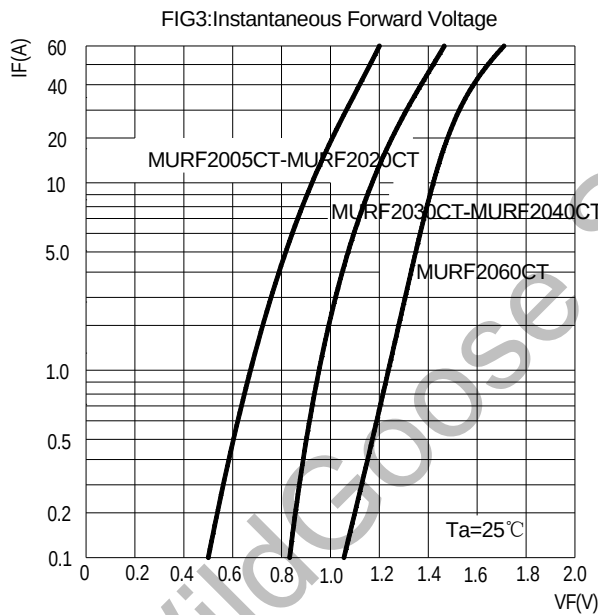
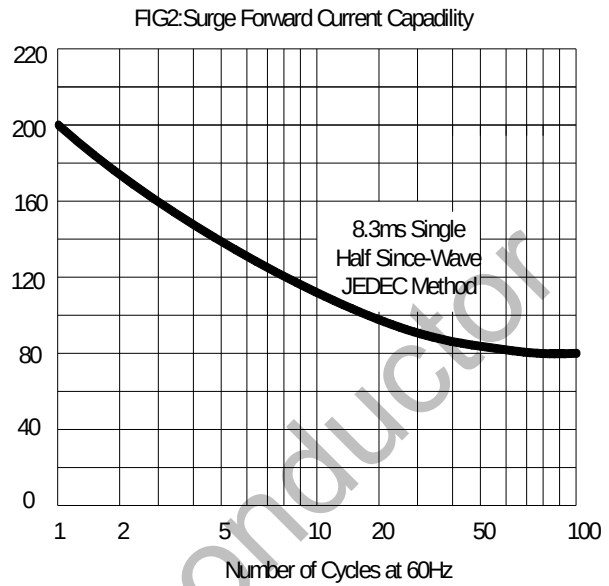
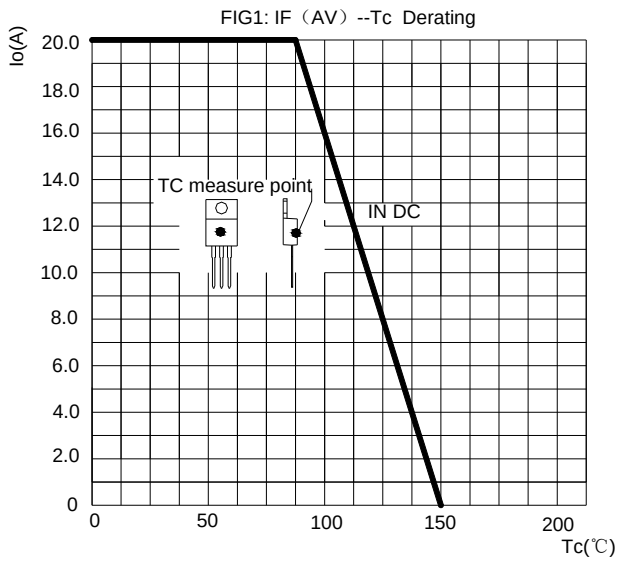
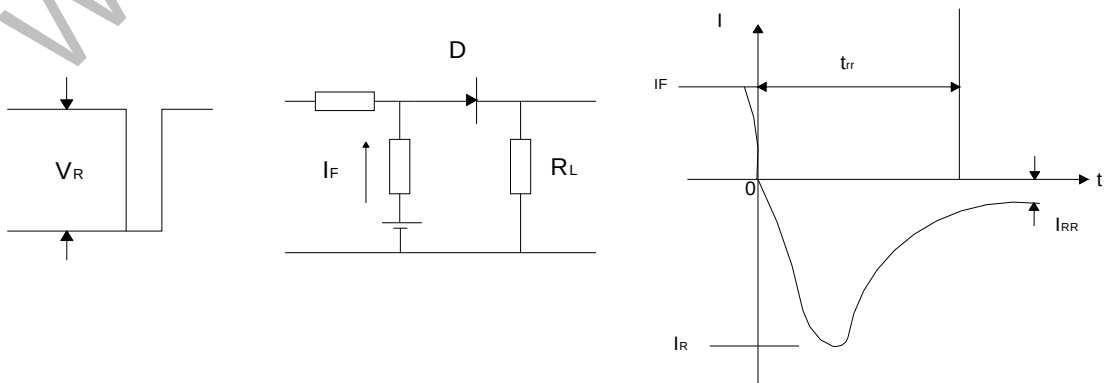
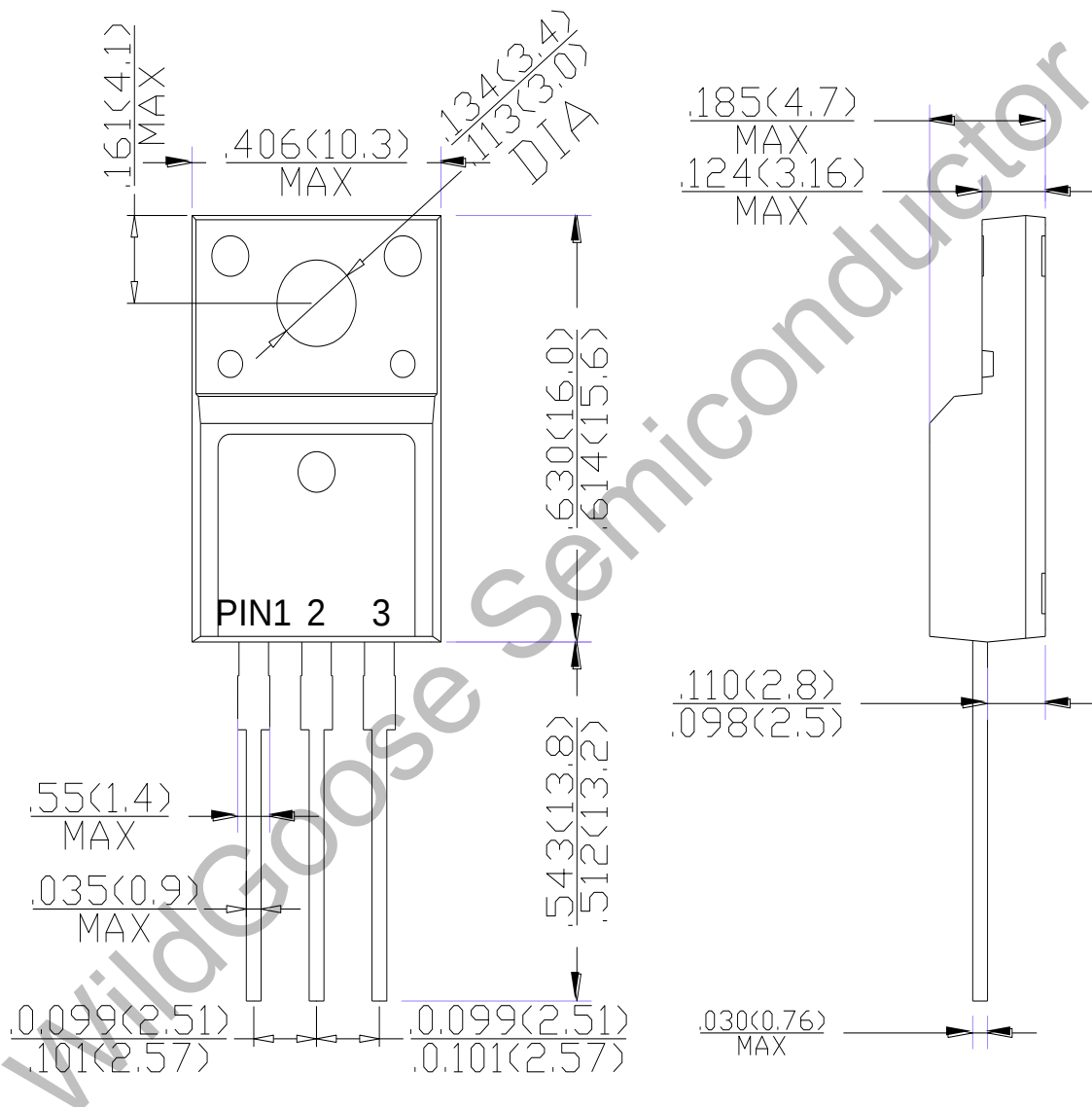


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



Package Dimension**TO-220F**

Dimensions in inches and (millimeters)