

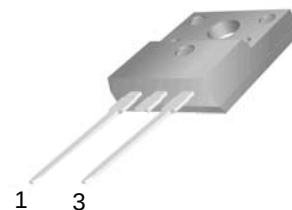


MURF3005-MURF3060

Features:

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

TO-220F-2L



1. Cathode 2. Anode

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

Parameter	Symbol	MURF 3005	MURF 3010	MURF 3015	MURF 3020	MURF 3030	MURF 3040	MURF 3060	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	$I_{F(AV)}$	30							A
Nonrepetitive Peak Surge Current(Surge applied at rated load conditions half wave, single phase, 60 Hz)	I_{FSM}	300							A
Operating Junction Temperature and Storage Temperature	T_J, T_{stg}	-55 to +150							°C
Maximum Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	4.5							°C/W

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	MURF 3005	MURF 3010	MURF 3015	MURF 3020	MURF 3030	MURF 3040	MURF 3060	Unit
Forward Voltage (Note 1) ($I_F = 30A, T_C = 25^{\circ}C$)	V_F	0.95				1.25		1.70	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, $T_C = 25^{\circ}C$)	I_R	10							μA
Maximum Reverse Recovery Time ($I_F = 0.5 A, I_R = 1.0 A, I_{REC} = 0.25 A$)	T_{RR}	35				50			ns

Note 1.Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$

Typical Characteristics

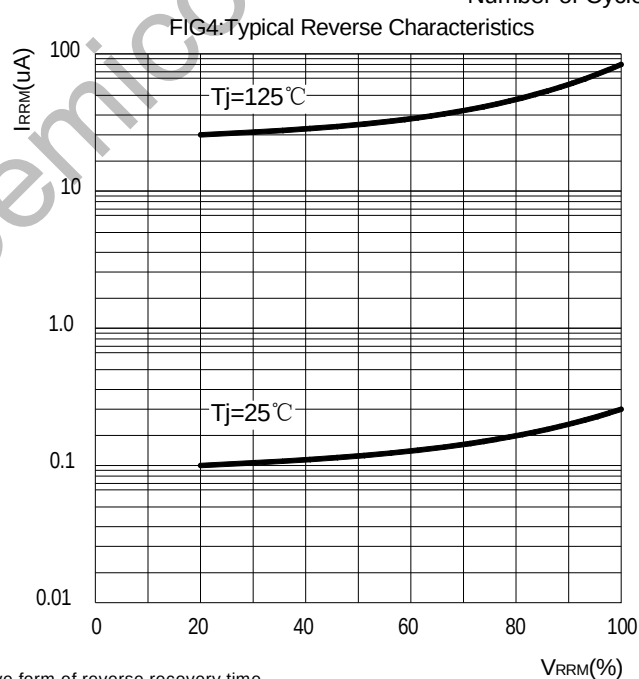
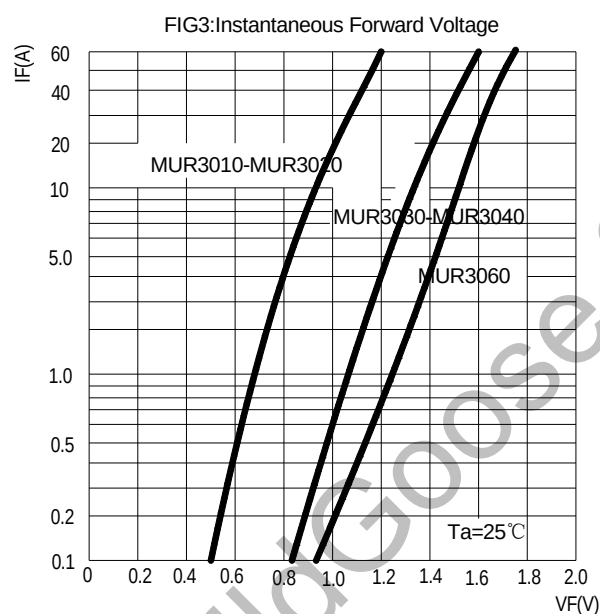
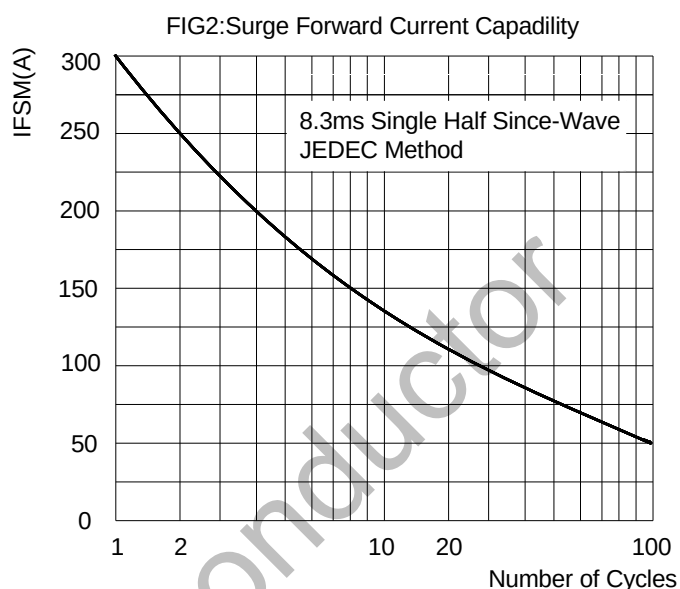
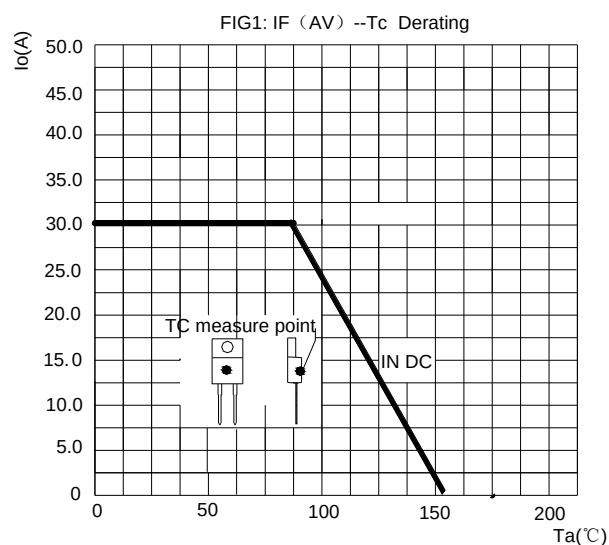
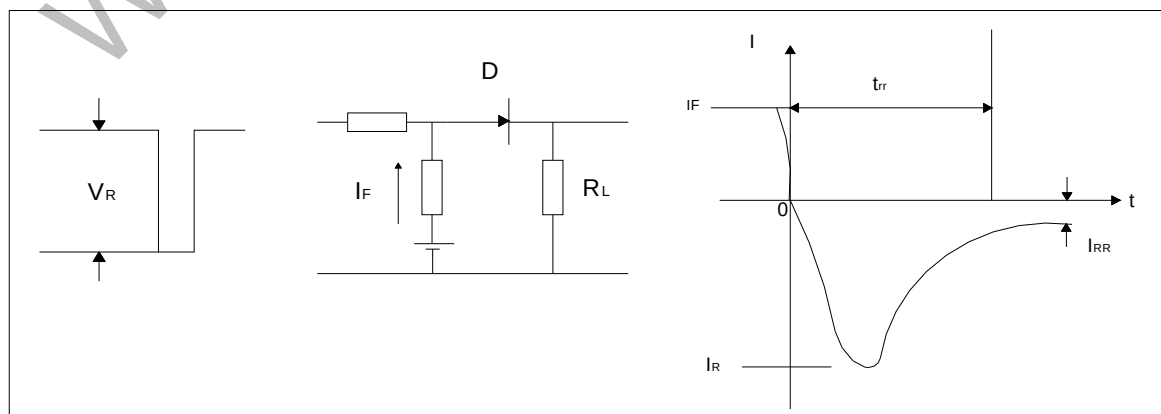
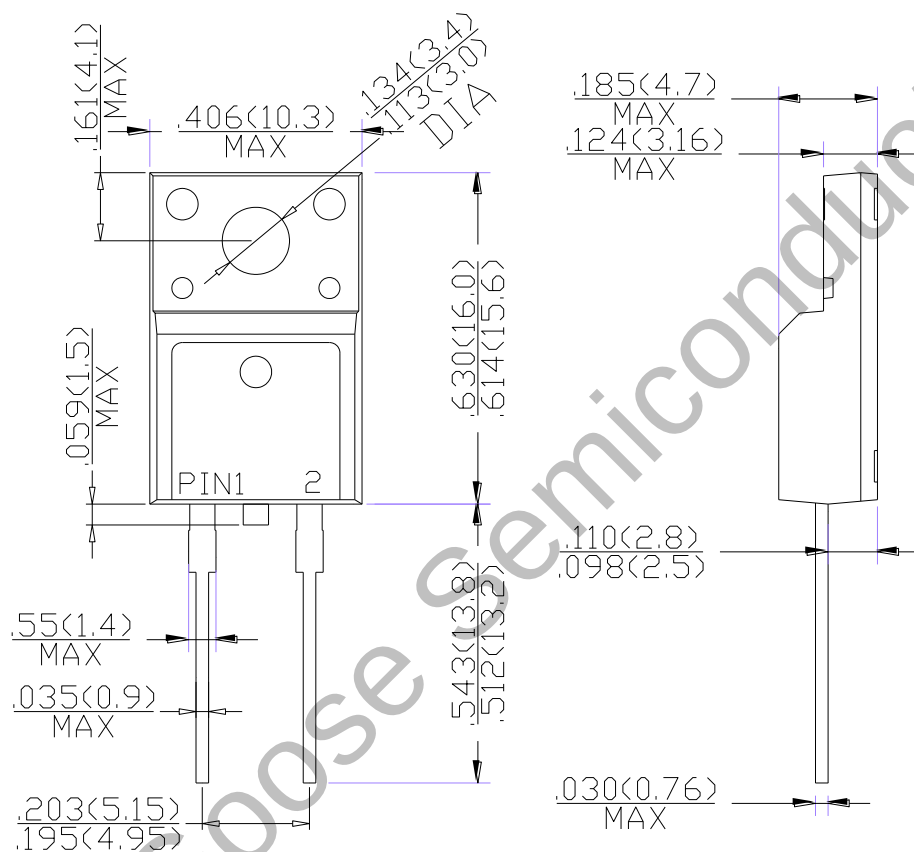


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



Package Dimension

TO-220F -2L



Dimensions in inches and (millimeters)