

MURF1010CT – MURF1060CT

10 Amps Super Fast Recovery



MURF1010CT – MURF1060CT

Features:

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

TO-220F



1. Anode 2. Cathode 3. Anode

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

Parameter	Symbol	MUR F1010 CT	MUR F1015 CT	MUR F1020 CT	MUR F1040 CT	MUR F1060 CT	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), Per Leg Total Device	$I_{F(AV)}$	5 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)	$R_{\theta JC}$	2.0					°C/W

ELECTRICAL CHARACTERISTICS (Per Diode Leg)

Parameter	Symbol	MUR F1010 CT	MUR F1015 CT	MUR F1020 CT	MUR F1040 CT	MUR F1060 CT	Unit
Forward Voltage (Note 1) ($I_F = 5A, T_C = 25^\circ C$)	V_F	0.975			1.3	1.70	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, $T_C = 25^\circ C$) (Rated DC Voltage, $T_C = 125^\circ C$)	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 $\leq 2.0\%$

Typical Characteristics

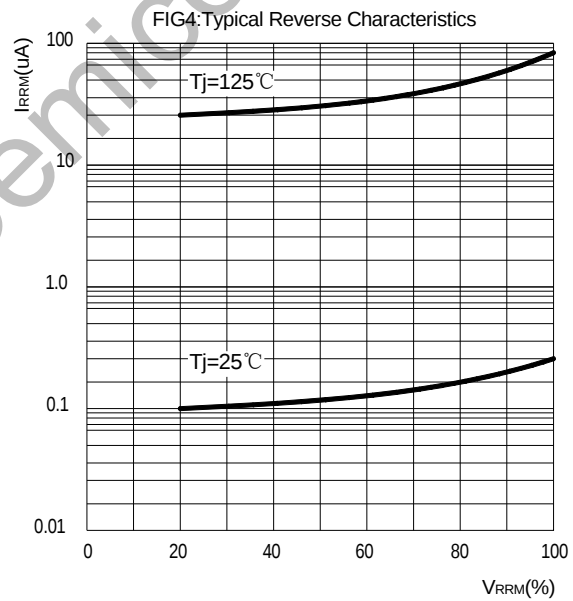
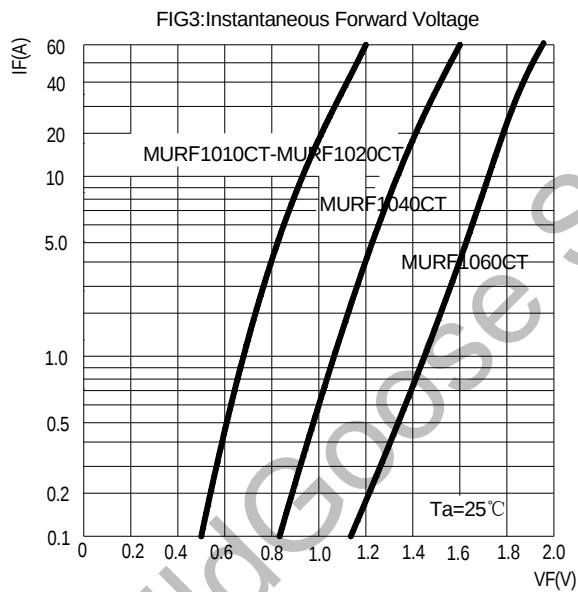
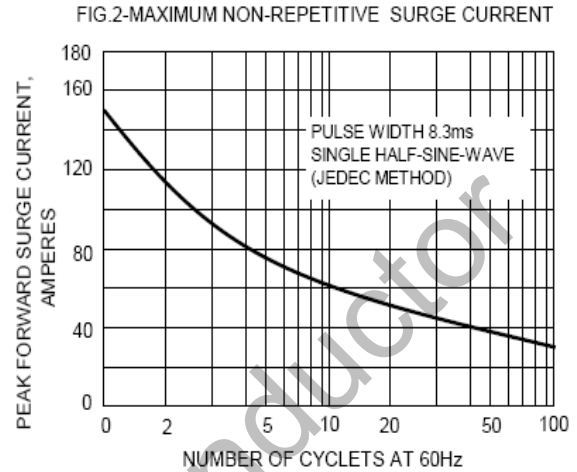
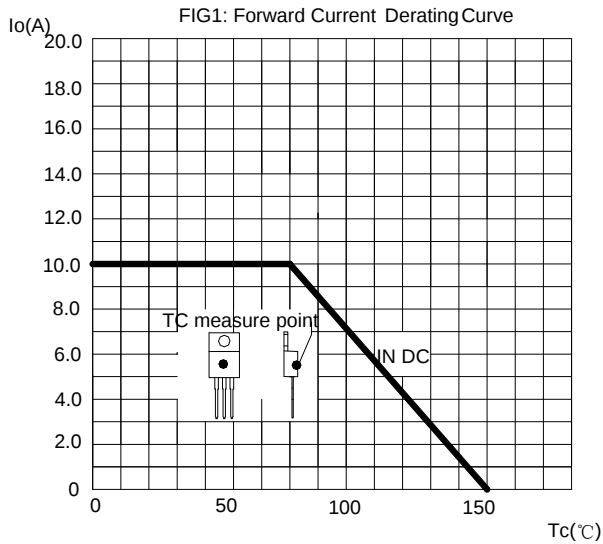
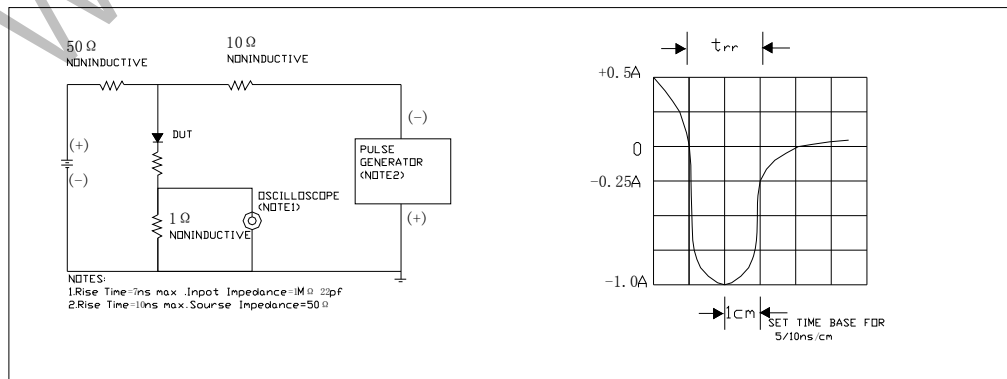


Diagram of circuit and Testing wave form of reverse recovery time



Package Dimension

TO-220F

Unit: mm

