

MUR1610CTR-MUR1660CTR

16 Amps Super Fast Recovery

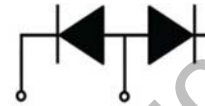
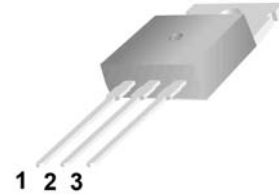


MUR1610CTR-MUR1660CTR

Features:

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

TO-220



1.Cathode 2.Anode 3. Cathode

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

Parameter	Symbol	MUR 1610 CTR	MUR 1615 CTR	MUR 1620 CTR	MUR 1640 CTR	MUR 1660 CTR	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 Per Leg Total Device	$I_{F(AV)}$	8 16					A
Peak Rectified Forward Current Per Diode Leg (Rated VR, Square Wave, 20 kHz)	I_{FM}	16					A
Nonrepetitive Peak Surge Current(Surge applied at rated load conditions half wave, single phase, 60 Hz)	I_{FSM}	180					A
Operating Junction Temperature and Storage Temperature	TJ, Tstg	-55 to +150					°C
Maximum Thermal Resistance, Junction-to-Case(Per Leg)	$R_{\theta JC}$	3.0			2.0		°C/W

ELECTRICAL CHARACTERISTICS (Per Diode Leg)

Parameter	Symbol	MUR 1610 CTR	MUR 1615 CTR	MUR 1620 CTR	MUR 1640 CTR	MUR 1660 CTR	Unit
Forward Voltage (Note 1)($I_F = 8.0$ A, $T_C = 25^\circ\text{C}$)	V_F	1.0			1.3	1.7	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, $T_C = 125^\circ\text{C}$) (Rated DC Voltage, $T_C = 25^\circ\text{C}$)	I_R	250 10			500 10		μA
Maximum Reverse Recovery Time ($I_F = 0.5$ A, $I_R = 1.0$ A, $I_{REC} = 0.25$ A)	T_{RR}	35			35		ns

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

Typical Characteristics

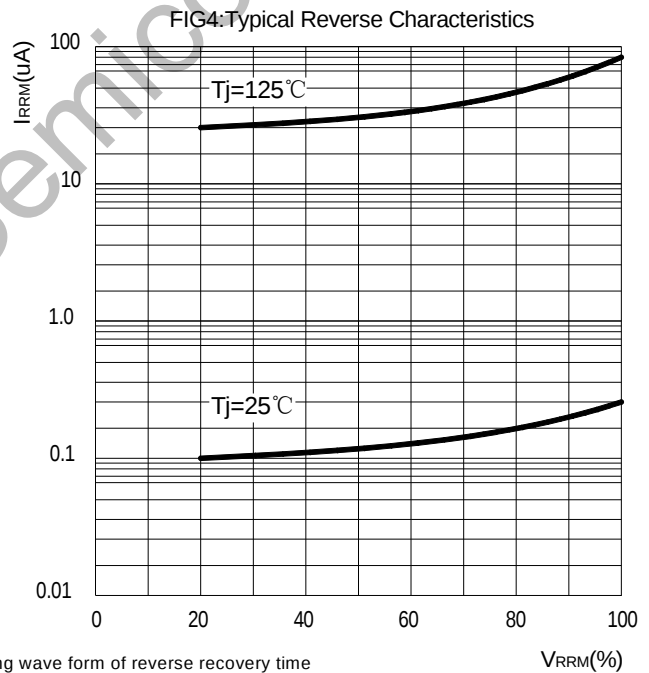
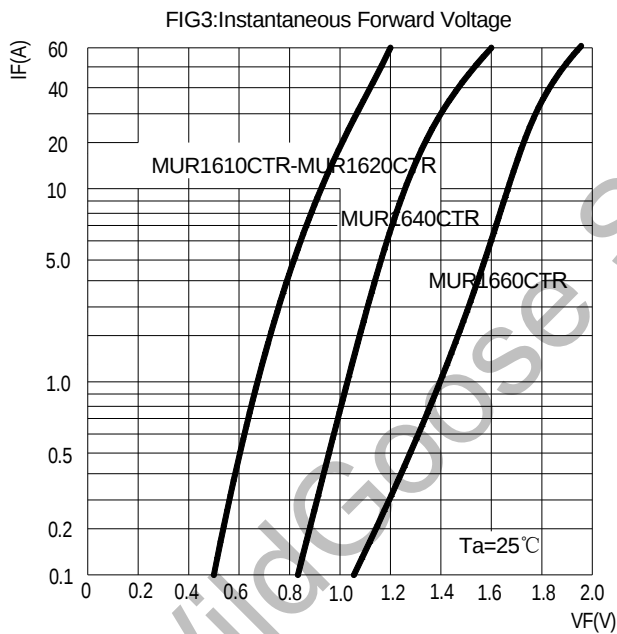
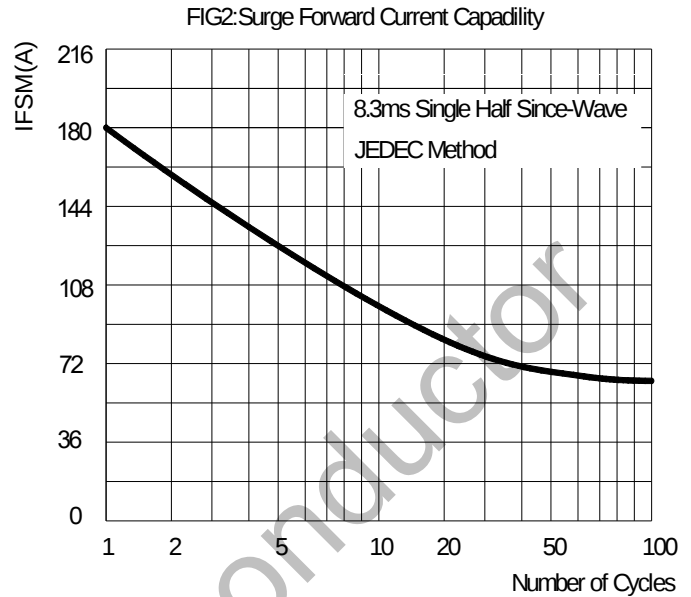
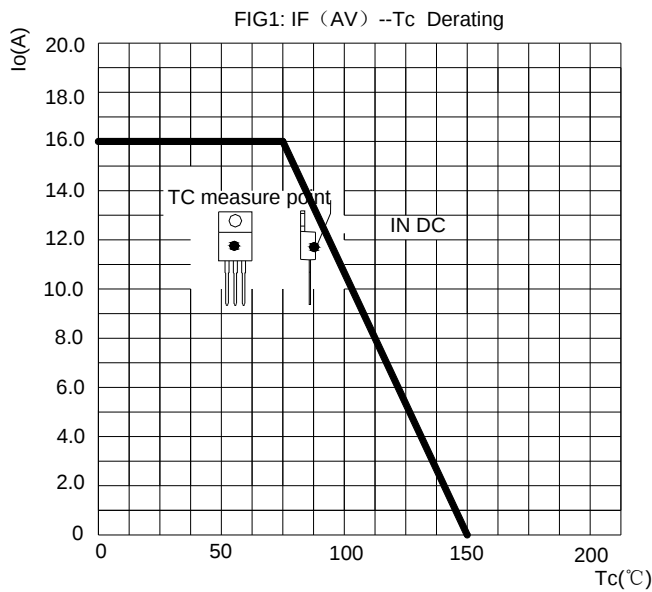
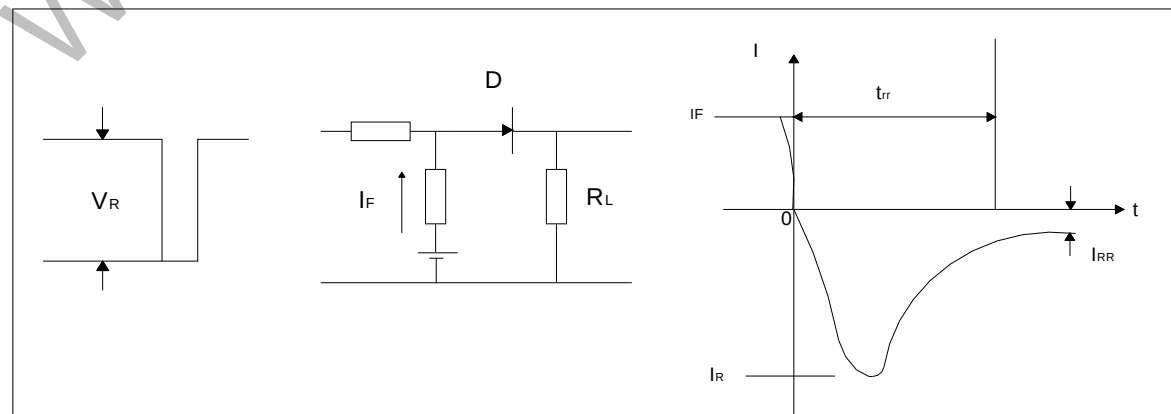
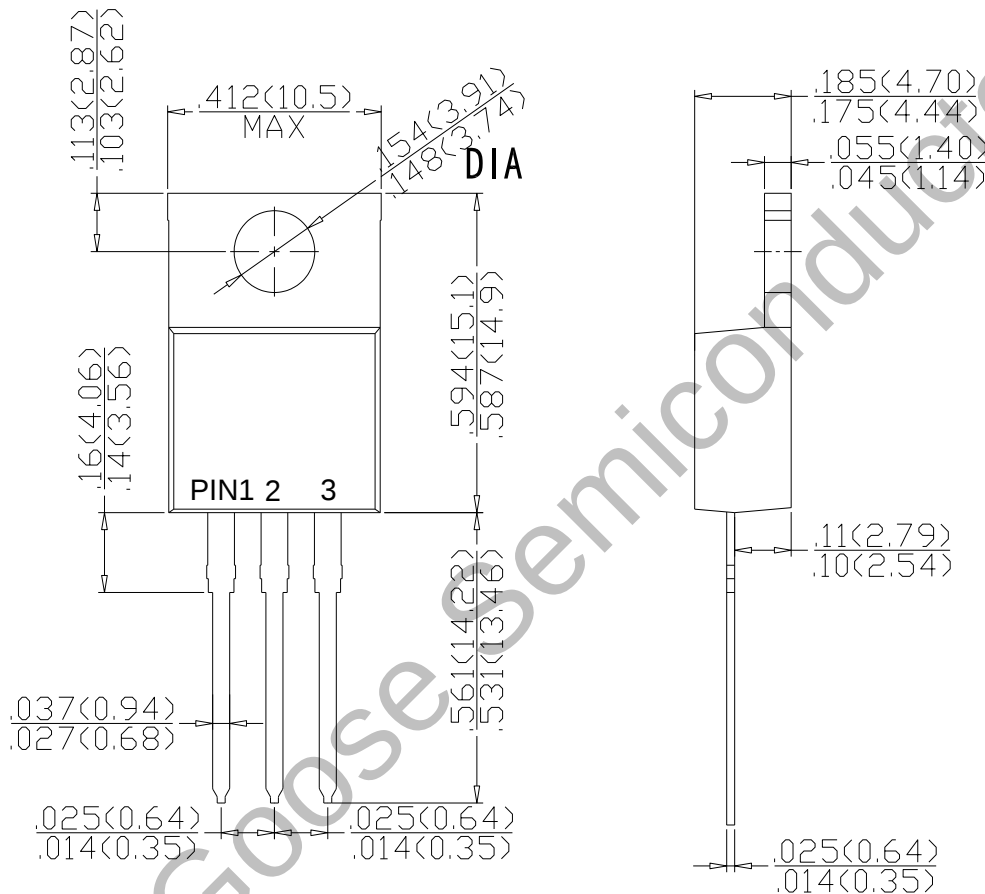


FIG5: Diagram of circuit and Testing wave form of reverse recovery time



Package Dimension

TO-220



Dimensions in inches and (millimeters)