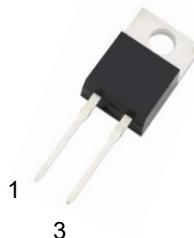


**MUR8120****Features:**

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

TO-220-2L



1. Cathode 3. Anode

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

Parameter	Symbol	MUR8120	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	1200	V
Maximum RMS Voltage	V_{RMS}	840	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	1200	V
Average Rectified Forward Current Total Device, (Rated V_R), $T_C = 25^\circ\text{C}$	$I_{F(AV)}$	8	A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half wave, single phase, 60 Hz)	I_{FSM}	125	A
Operating Junction Temperature and Storage Temperature	T_J, T_{stg}	-50 to +150	°C
Maximum Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	2.0	°C/W

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	MUR8120	Unit
Forward Voltage ($I_F = 8\text{A}$, $T_C = 25^\circ\text{C}$) (Note 1) ($I_F = 8\text{A}$, $T_C = 125^\circ\text{C}$)	V_F	1.85 1.35	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, $T_C = 25^\circ\text{C}$) (Rated DC Voltage, $T_C = 125^\circ\text{C}$)	I_R	10 500	μA
Maximum Reverse Recovery Time ($I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{REC} = 0.25\text{A}$)	T_{RR}	75	ns

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

Typical Characteristics

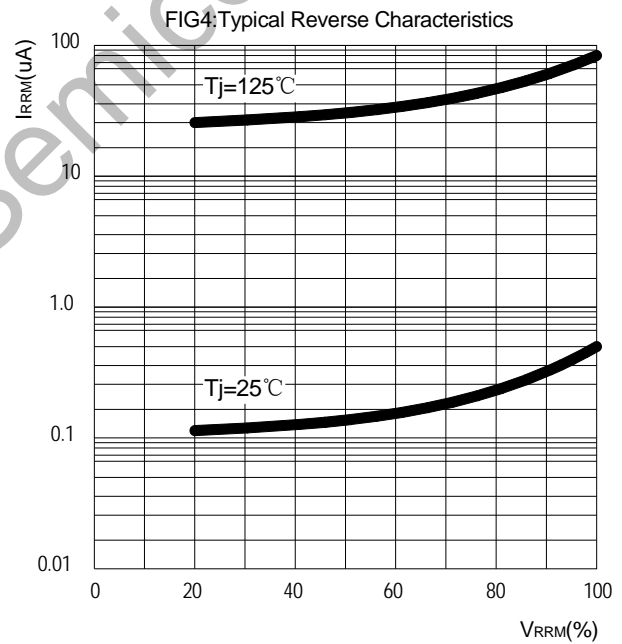
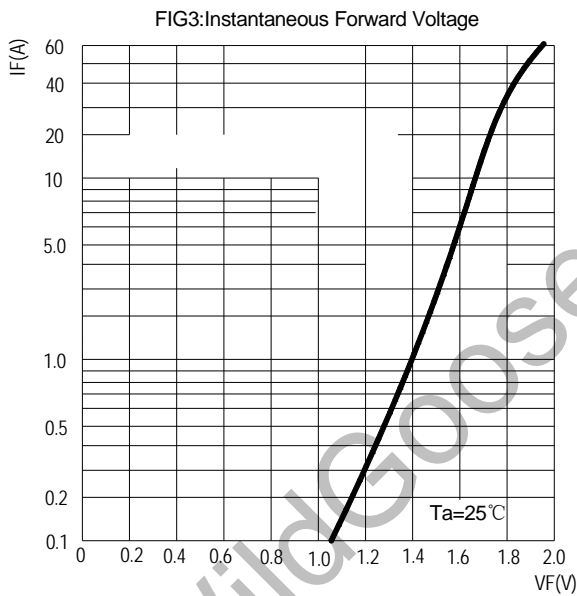
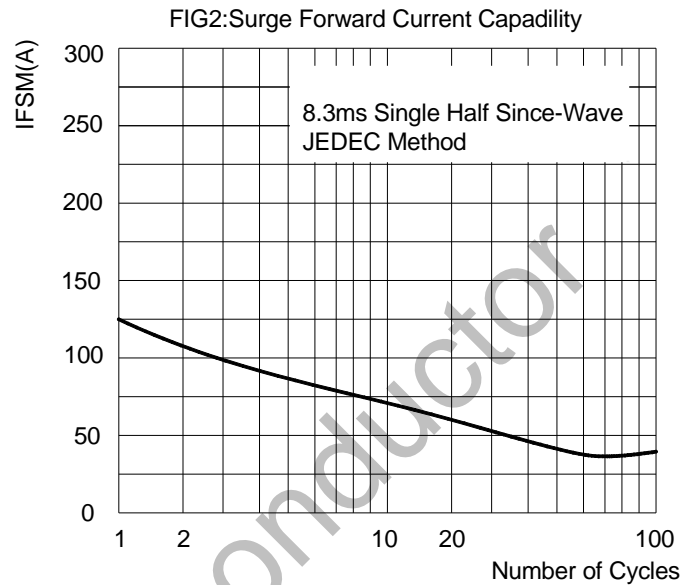
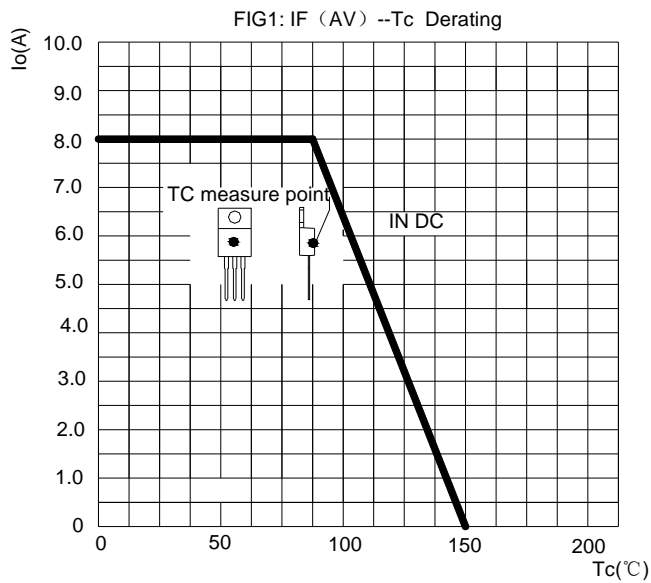
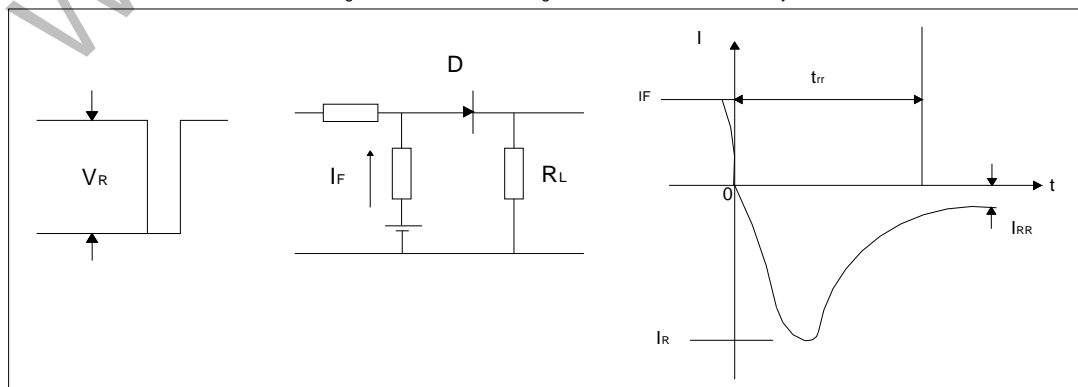


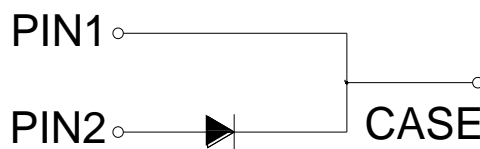
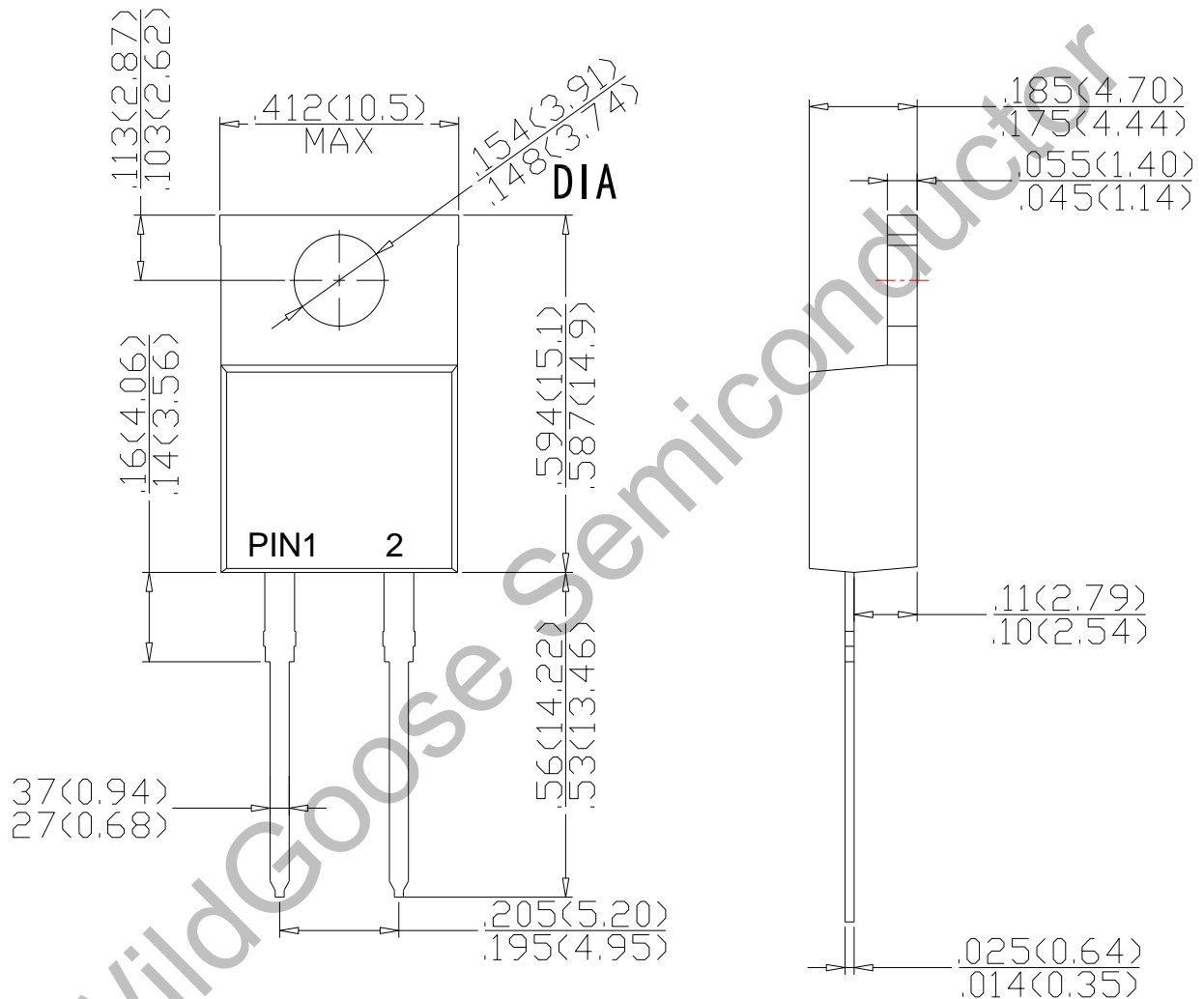
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



Package Dimension

TO-220-2L

Unit: mm



Dimensions in inches and (millimeters)