



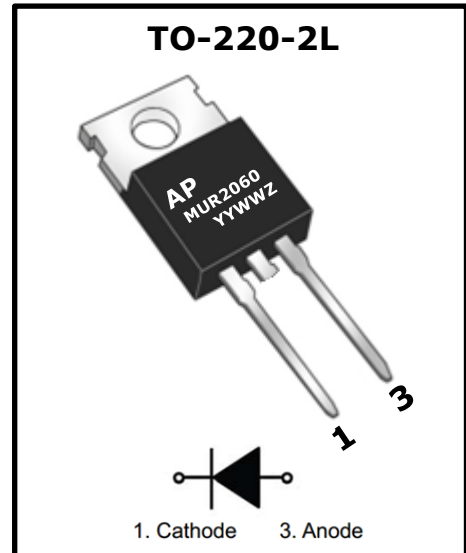
Super-fast Recovery Rectifier Diodes Reverse Voltage 50 to 600 Volts Forward Current 20A

Features

- Super-fast Rectifier diode
- High surge capability
- Low Forward Voltage Drop
- High surge current capability
- Super Fast Switching Speed For High Efficiency
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7s, per JESD 22-B106

Mechanical Data

- **Case** : Case: TO-220-2L
- **Terminals** : Lead solderable per MIL-STD-202, Method 208
- **Lead free finish, RoHS compliant**
- **Case Material**: "Green" molding compound, UL flammability classification 94V-0, "Halogen-free".
- **Weight** : 1.93gram



Maximum Ratings Characteristics

Parameter		Symbol	MUR 2005	MUR 2010	MUR 2015	MUR 2020	MUR 2030	MUR 2040	MUR 2060	Unit
Maximum Repetitive 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 _{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current	Per Device	I _{F(AV)}	20							A
Peak Forward Surge Current 8.3ms Single Half sine Wave Superimposed on Rated Load		I _{FSM}	200							A
Forward Voltage at 20A (Note 1)	T _a = 25°C	V _F	0.975				1.3		1.5	V
	T _a = 125°C		0.895				1.0		1.2	
Maximum Reverse Recovery Time ⁽¹⁾		trr	35							ns
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _a = 25°C	I _R	5				10			uA
	T _a = 125°C		250				500			
Maximum Thermal Resistance Junction to Case		R _{θjc}	3				2			°C/W
Operating Junction temperature Range		T _J	-55 ~ +150							°C
Storage Temperature Range		T _{STG}	-55 ~ +150							°C

$T_A = 25^{\circ}C$ unless otherwise specified

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Note

- (1) Pulse Test :Pulse Width = 300uS, Duty <2.0%



Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise specified)

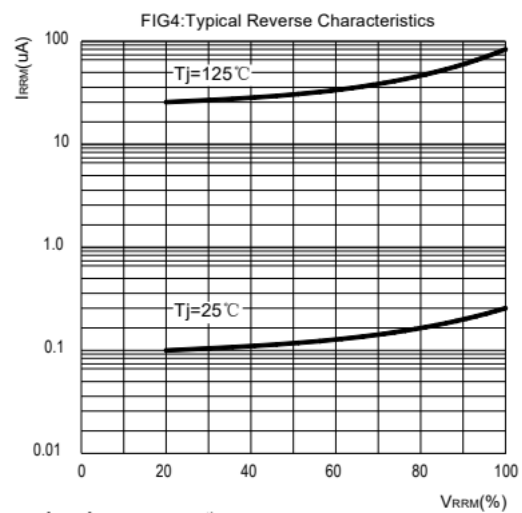
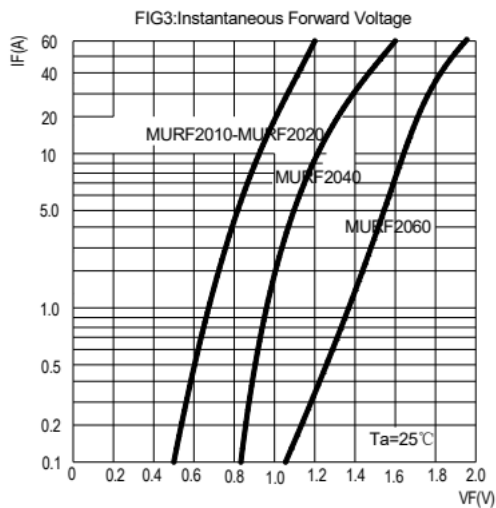
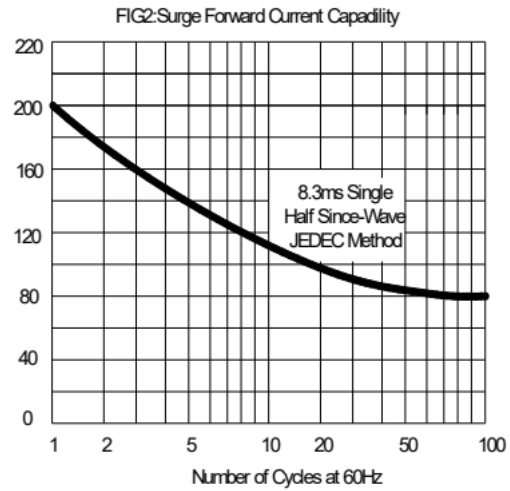
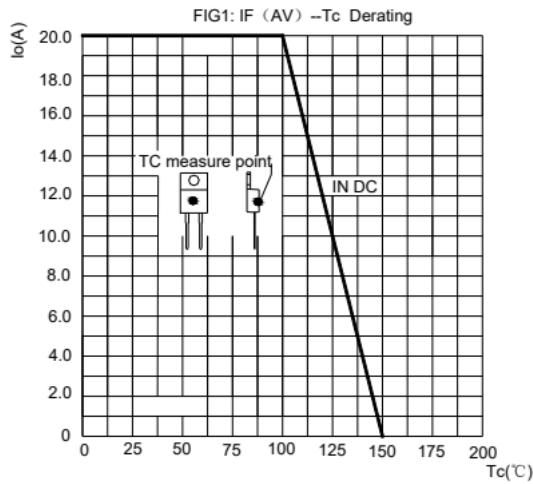
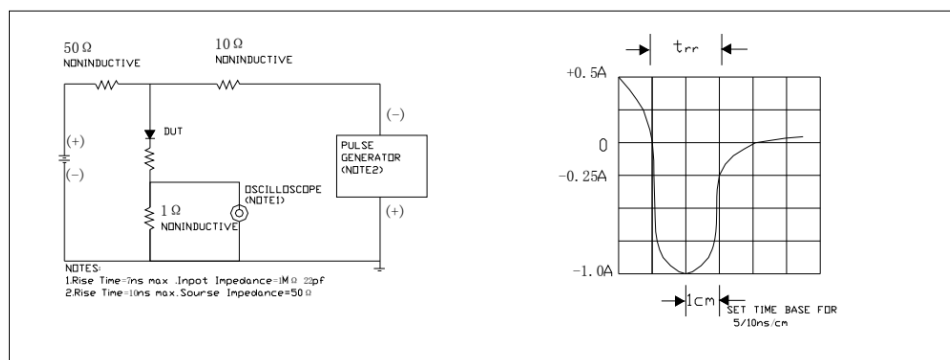


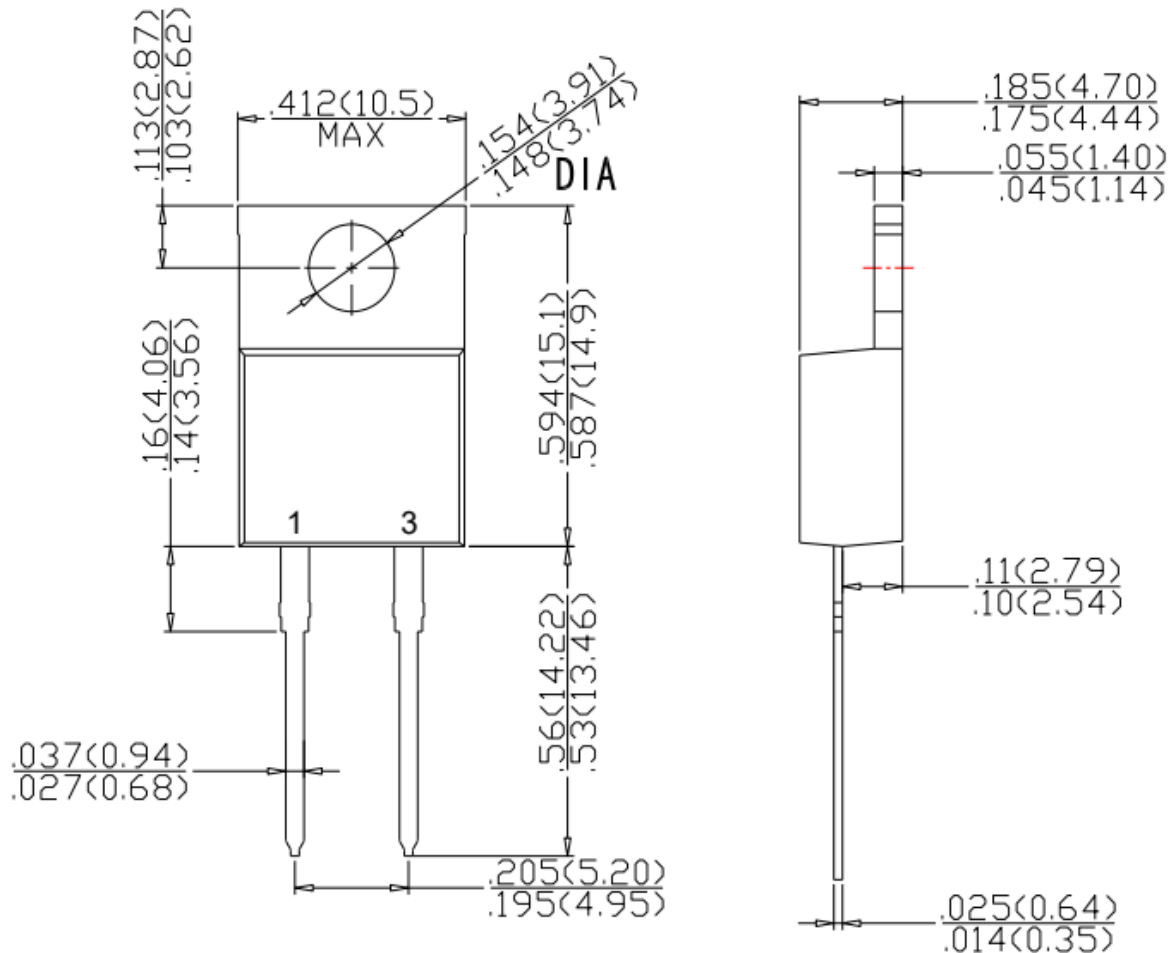
Diagram of circuit and Testing wave form of reverse recovery time





Package Dimension : TO-220-2L

Unit : mm



Ordering Information

Part No	Package	Packing	Finish	Halogen	Packing Unit
MUR2005 MUR2010 MUR2015 MUR2020 MUR2030 MUR2040 MUR2060	TO-220-2L	Tube	Sn	Free	Tube : 50ea Inner : 1000ea MOQ : 5,000ea



Revision History

No	Date	Contents
0	2024-12-03	Initial Brief Datasheet Release

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