MUR2010CT THRU MUR2060CT

Ultra-Fast Recovery Rectifier Diodes

Features

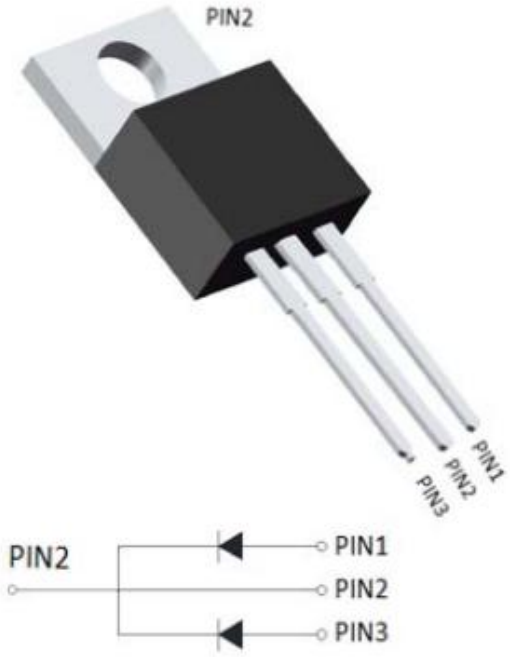
- Super-fast recovery time for high efficiency
- Glass passivated chip junction
- Low leakage current
- High forward surge capability

Typical Application

For use in high frequency rectification and freewheeling application in switching mode converters and inverters for consumer ,computer and telecommunication.

Mechanical Data

- Package: TO-220AB
  Molding compound meets UL 94 V-0 flammability rating,RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Color Band denotes cathode end



■ Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions		MUR-CT				
					2010	2015	2020	2040	2060
Repetitive Peak Reverse Voltage	VRRM	V			100	150	200	400	600
Average Forward Current	IO	A	60Hz sine wave,R-load	With heatsink Tc =90℃	20				
				Without heatsink Tc =25℃	5				
Surge(Nonrepetitive)Forward Current	IFSM	A	60HZ sine wave, 1 cycle, Ta=25℃		125				
Current Squared Time	I²t	A²s	1ms≤t＜8.3ms Tj=25℃,Rating of per diode		65				
Storage Temperature	Tstg	℃			-55 ~ +150				
Junction Temperature	T_j	℃			-55 ~ +150				

Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	Symbol	Unit	Conditions		MUR-CT				
					2010	2015	2020	2040	2060
Peak Forward Voltage	V_{FM}	V	IFM=10A		0.975			1.3	1.7
Peak Reverse Current	IRRM1	μA	VRM=VRRM	Ta=25℃	10				
	IRRM2			Ta=125℃	500				
Maximum reverse recovery time	Trr	ns	I_F=0.5A,I_R=1.0A,I_{rr}=0.25A		35				50
Thermal Resistance	RθJ-C	RθJ-C	Between junction and case		2.0				

■ Characteristics (Typical)

FIG1: Forward Current Derating Curve

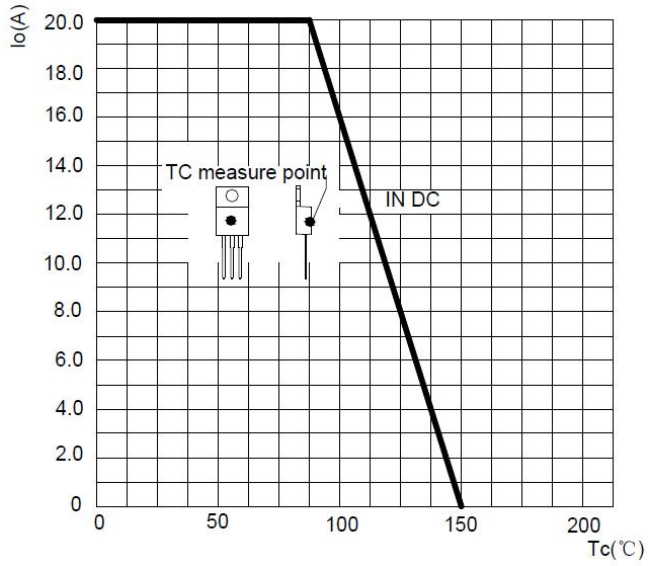


FIG2:Surge Forward Current Capability

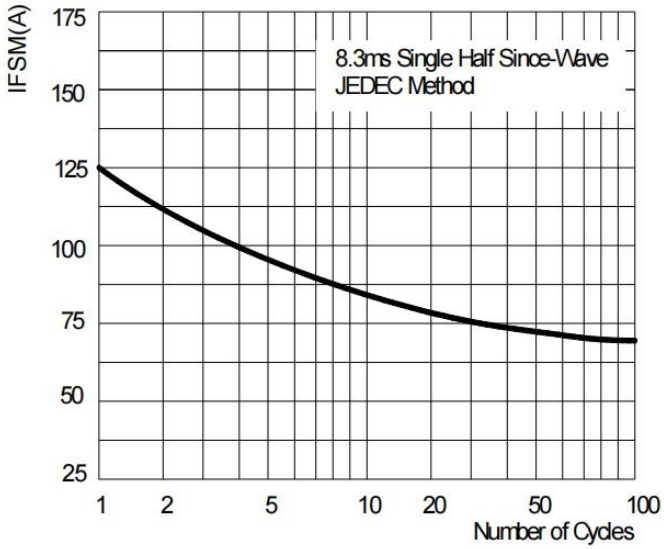


FIG3:Instantaneous Forward Voltage

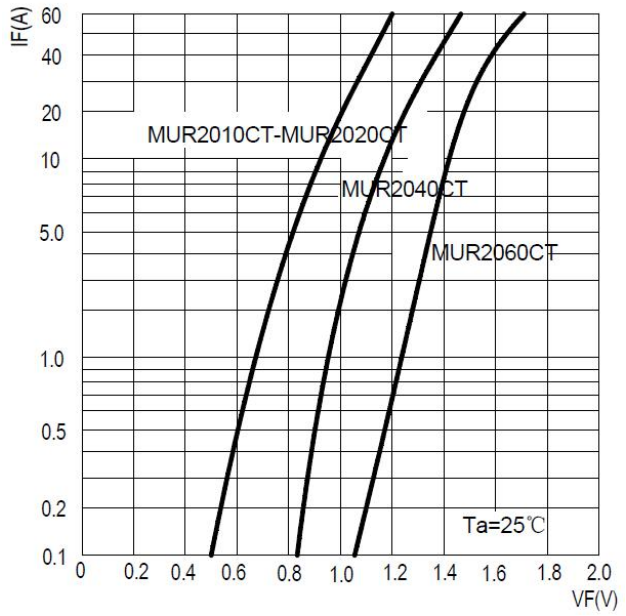


FIG4:Typical Reverse Characteristics

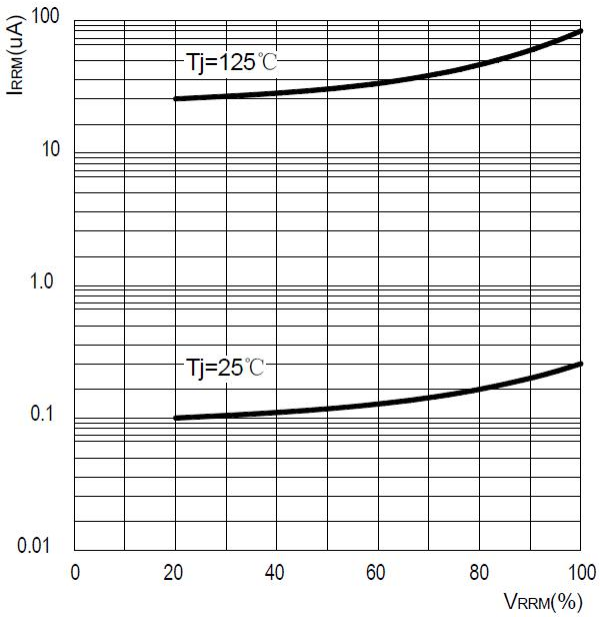
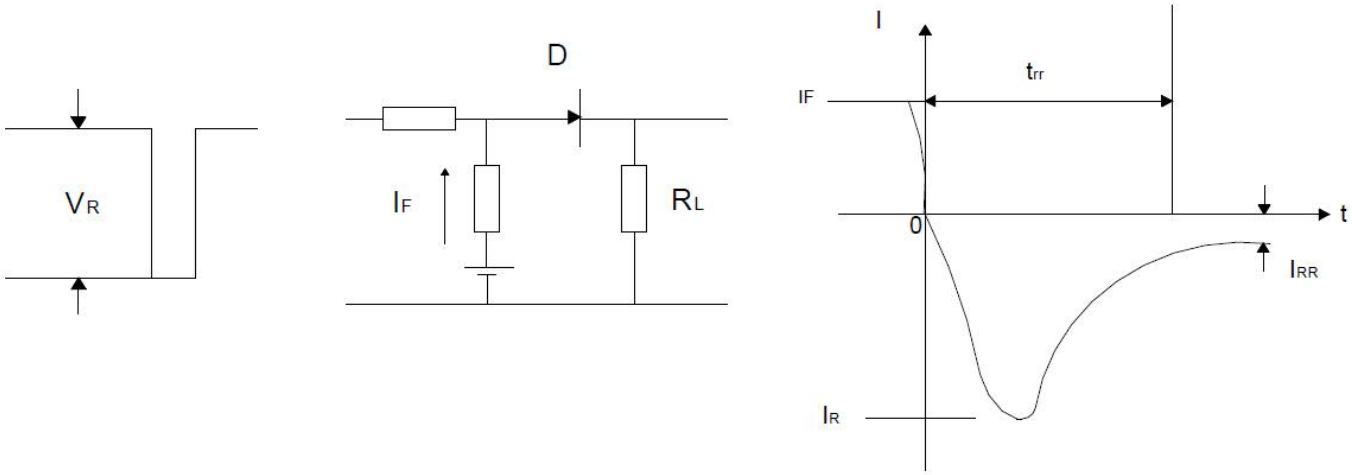


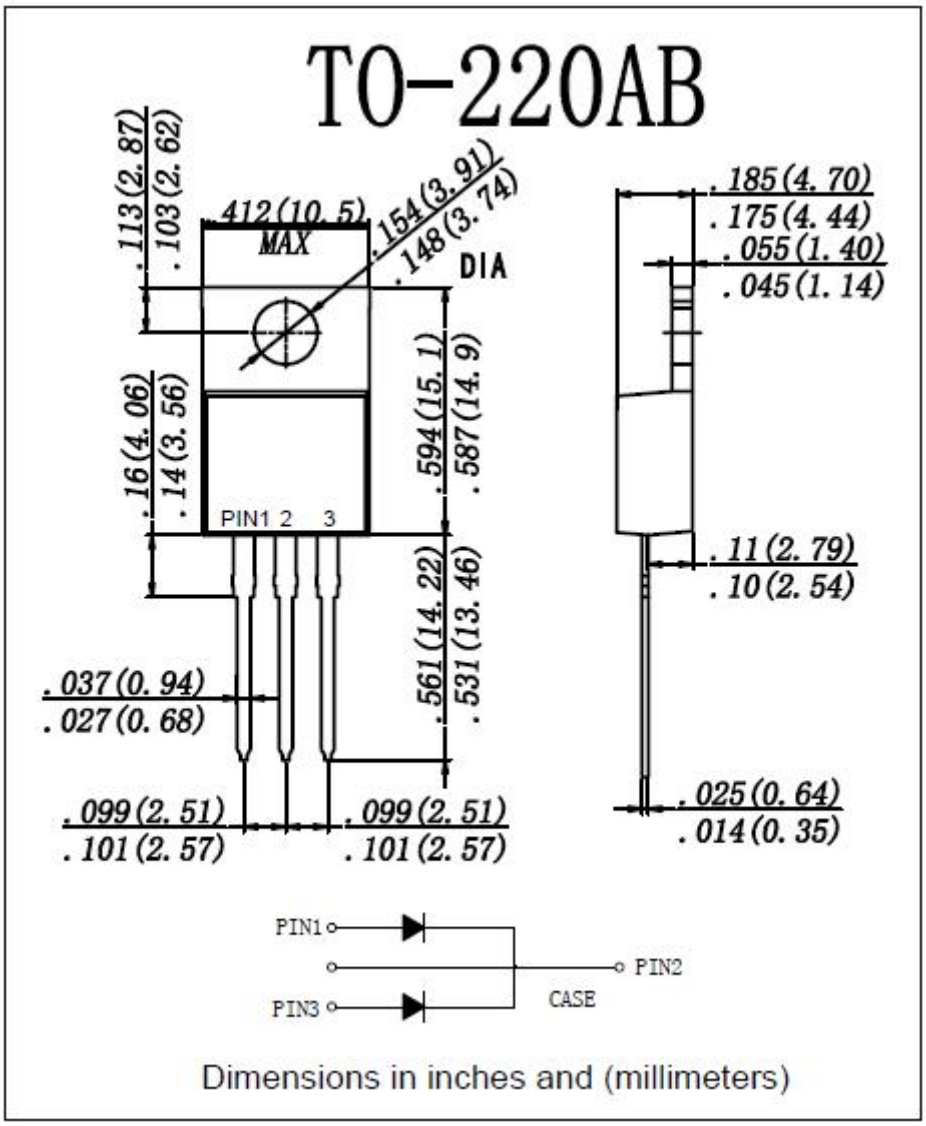
FIG5:Diagram of circuit and Testing wave form of reverse recovery time



■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR1010CT~MUR1060CT	TO-220AB	50	1000	5000	Tube

■ Outline Dimensions



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