MUR1010CT THRU MUR1060CT

Ultra-Fast Recovery Rectifier Diodes

Features

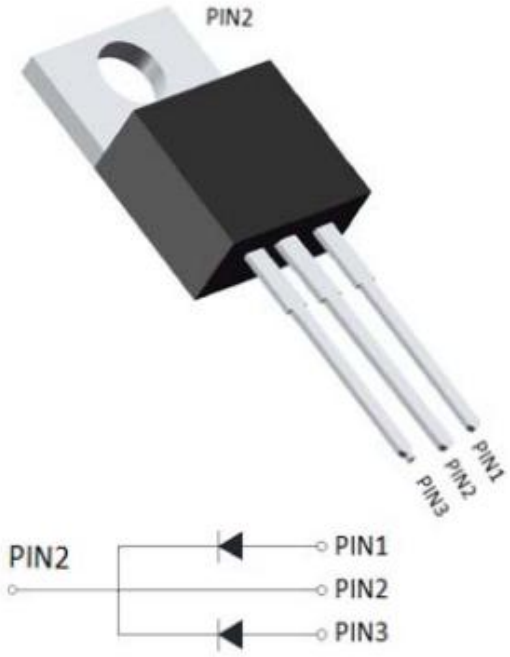
- Super-fast recovery time for high efficiency
- Glass passivated chip junction
- Low leakage current
- High forward surge capability

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				
				1010	1015	1020	1040	1060
Repetitive Peak Reverse Voltage	V_{RRM}	V		100	150	200	400	600
Average Forward Current	I_O	A	Half-sine wave, Resistance load, Ta(Fig 1)	10				
Surge(Nonrepetitive)Forward Current	I_{FSM}	A	60HZ sine wave, 1 cycle, Ta=25℃	55				
Current Squared Time	I^2t	A^2s	1ms≤t＜8.3ms Tj=25℃,Rating of per diode	12				
Storage Temperature	T_{stg}	℃		-55 ~ +150				
Junction Temperature	T_j	℃		-55 ~ +175				

Electrical Characteristics（Ta=25℃ Unless otherwise specified）

PARAMETER	Symbol	Unit	Conditions		MUR-CT				
					1010	1015	1020	1040	1060
Peak Forward Voltage	VFM	V	I_{FM}=5.0A		0.975			1.30	1.7
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	Ta=25℃	10				
	I_{RRM2}			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	$R_{\theta J-C}$	$R_{\theta J-C}$	Between junction and case		2.0				

■ Characteristics (Typical)

FIG1: Forward Current Derating Curve

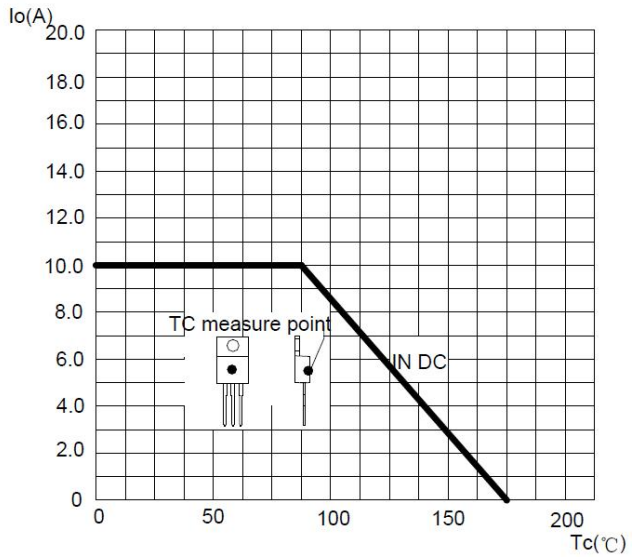


FIG2:Surge Forward Current Capability

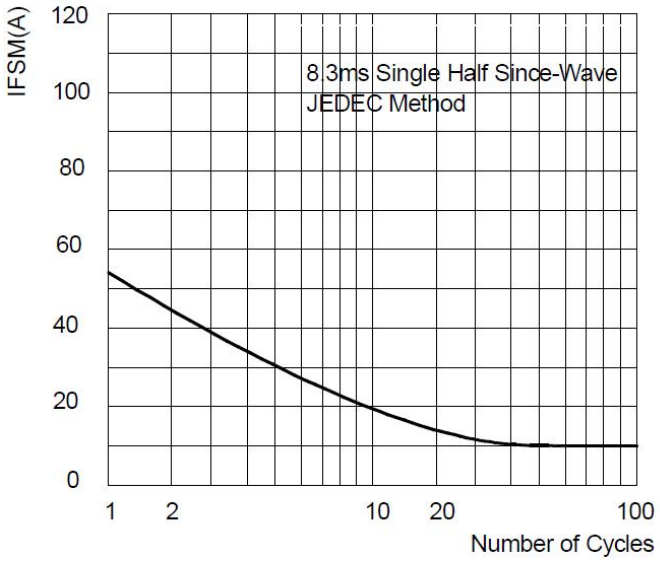


FIG3:Instantaneous Forward Voltage

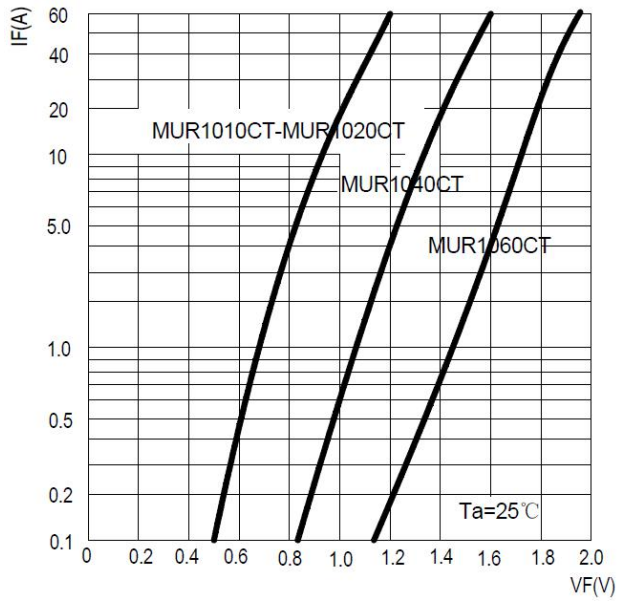


FIG4:Typical Reverse Characteristics

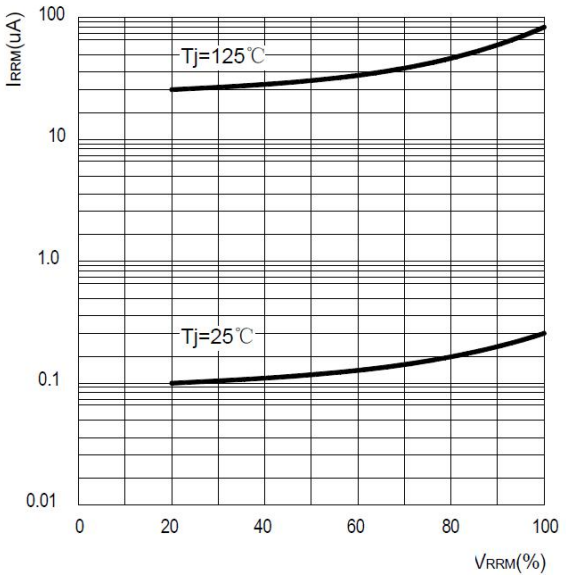
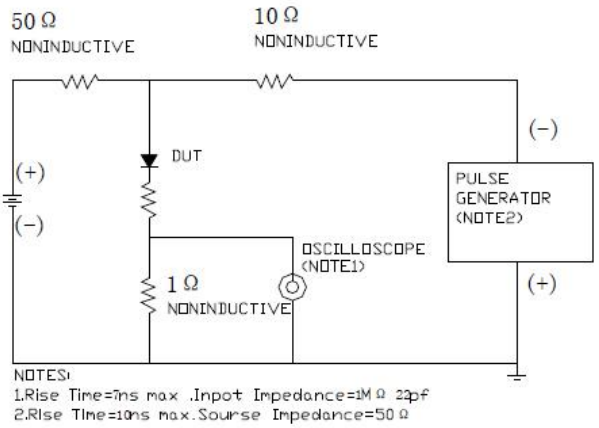
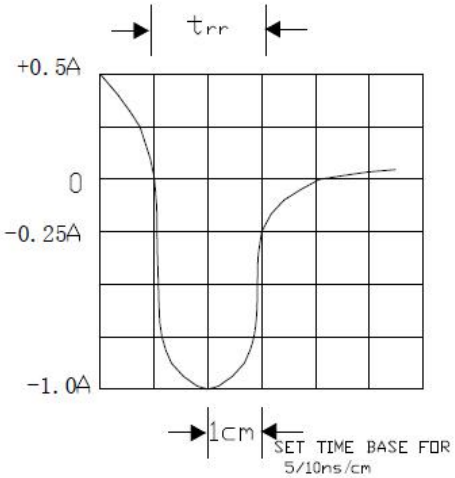


FIG5:Diagram of circuit and Testing wave form of reverse recovery time

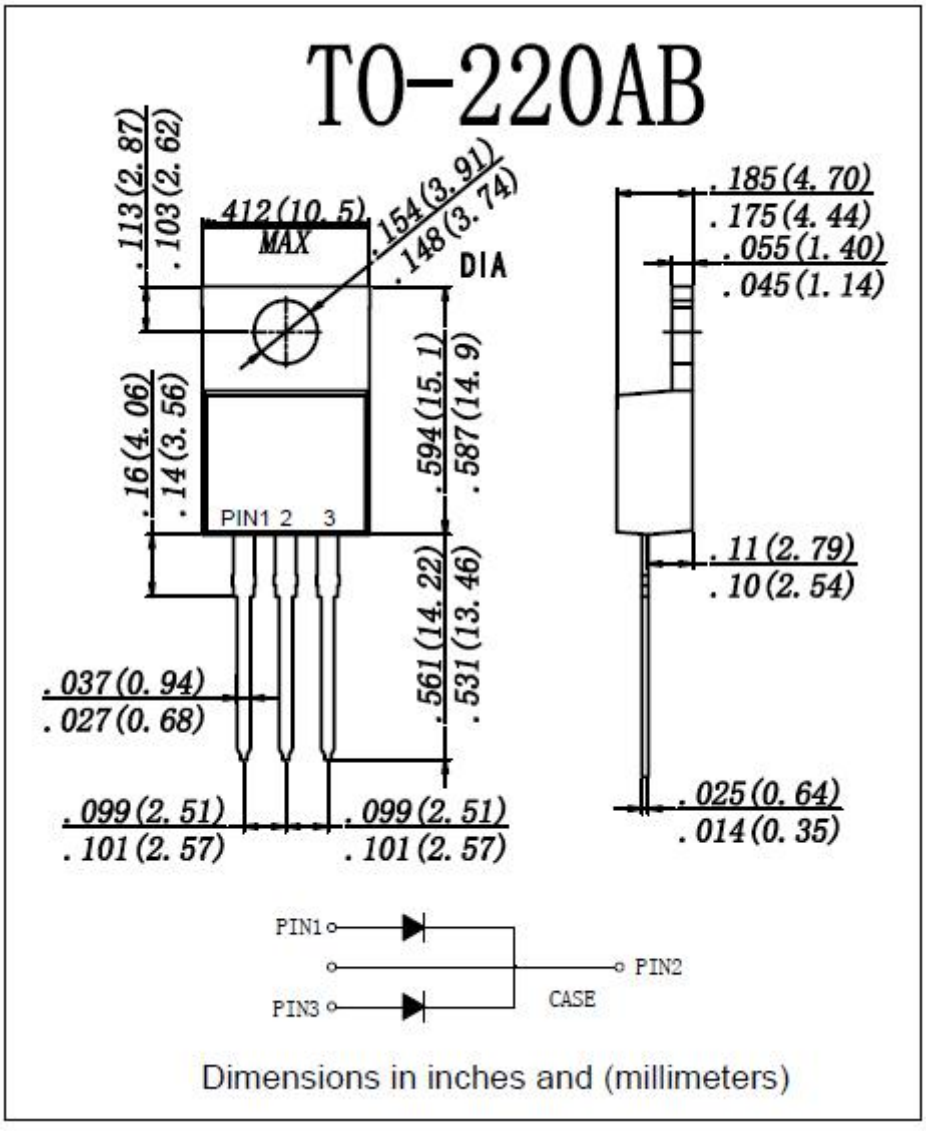




■ Ordering Information (Example)

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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