

MUR2010CT THRU MUR2060CT

Ultra-Fast Recovery Rectifier Diodes

Features

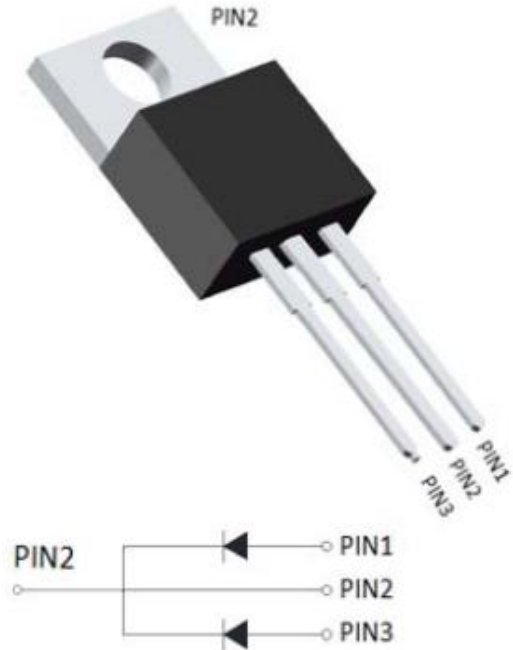
- Super-fast recovery time for high efficiency
- Glass passivated chip junction
- Low leakage current
- High forward surge capability

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°C 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°C	20			
				Without heatsink Tc =25°C	5			
Surge(Nonrepetitive)Forward Current	IFSM	A	60HZ sine wave, 1 cycle, Ta=25°C	125				
Current Squared Time	I ² t	A ² s	1ms≤t<8.3ms Tj=25°C,Rating of per diode	65				
Storage Temperature	Tstg	°C		-55 ~ +150				
Junction Temperature	Tj	°C		-55 ~ +150				

Electrical Characteristics (Ta=25°C 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°C				
	IRRM2			Ta=125°C				
Maximum reverse recovery time	T _{rr}	ns	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A	25			50	
Thermal Resistance	R _{θJ-C}	R _{θJ-C}	Between junction and case	2.0				



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■ Characteristics (Typical)

FIG1: Forward Current Derating Curve

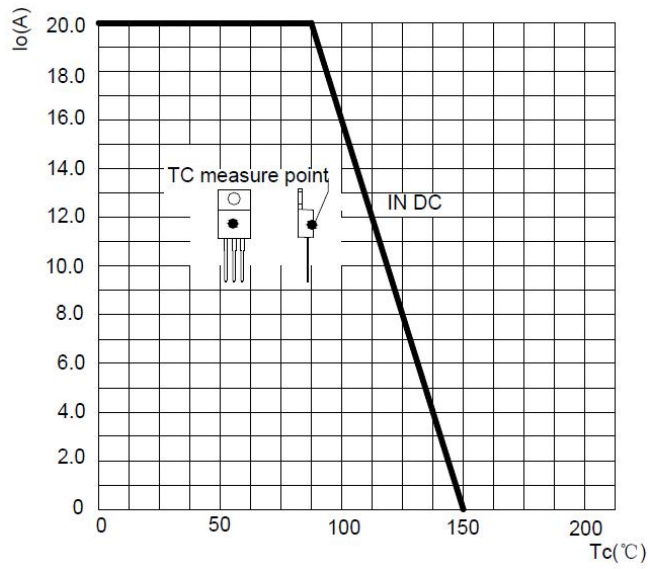


FIG2: Surge Forward Current Capability

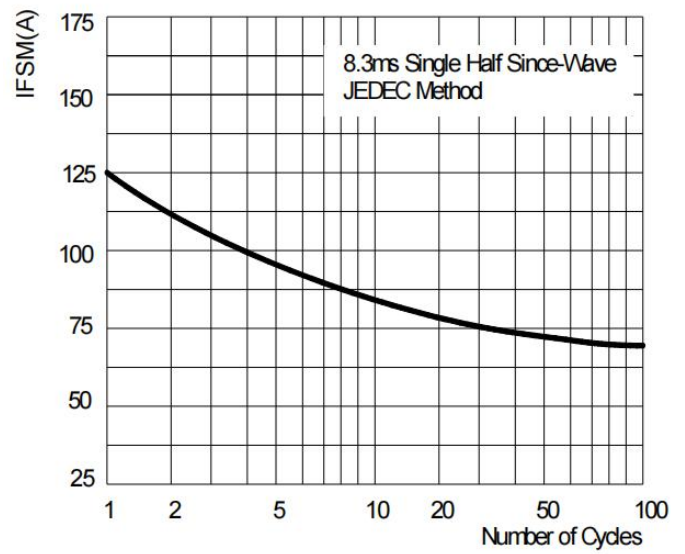


FIG3: Instantaneous Forward Voltage

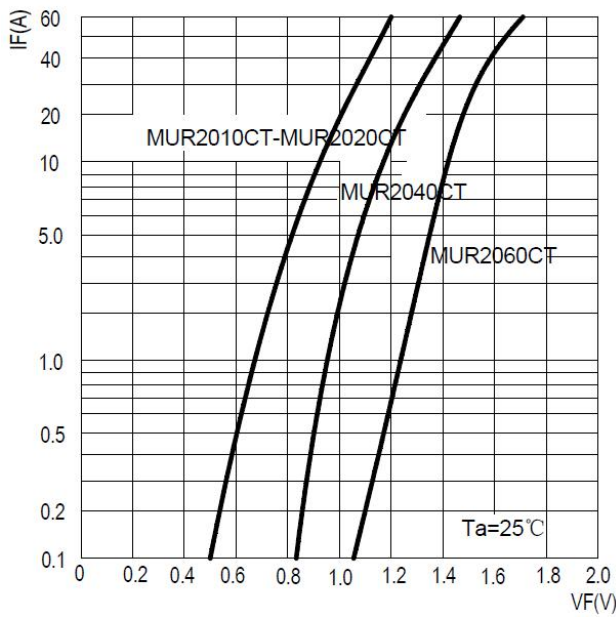


FIG4: Typical Reverse Characteristics

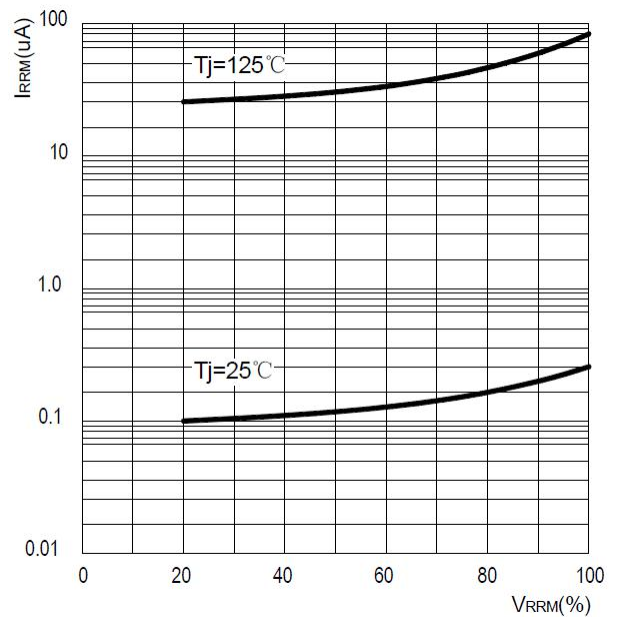


FIG5: Diagram of circuit and Testing wave form of reverse recovery time

