

MUR810 THRU MUR860

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-220AC
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				
				810	815	820	840	860
Repetitive Peak Reverse Voltage	V_{RRM}	V		100	150	200	400	600
Average Forward Current	I_o	A	60HZ sine wave, R- load, Ta=25°C	8				
Surge(Nonrepetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, Ta=25°C	135				
Current Squared Time	$I^2 t$	A ² s	1ms≤t<8.3ms Tj=25°C	65				
Storage Temperature	T_{stg}	°C		-55 ~ +150				
Junction Temperature	T_j	°C		-55 ~ +150				

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	Unit	Conditions		MUR				
					810	815	820	840	860
Peak Forward Voltage	V _{FM}	V	I _{FM} =8.0A		0.95			1.25	1.7
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	Ta=25℃	5				
	Ta=125℃			500					
Reverse recovery time	T _{rr}	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A		25			35	
Thermal Resistance	R _{θJ-A}	℃/W	Between junction and case		2.0				



MUR810 THRU MUR860

■ Characteristics (Typical)

FIG1: Forward Current Derating Curve

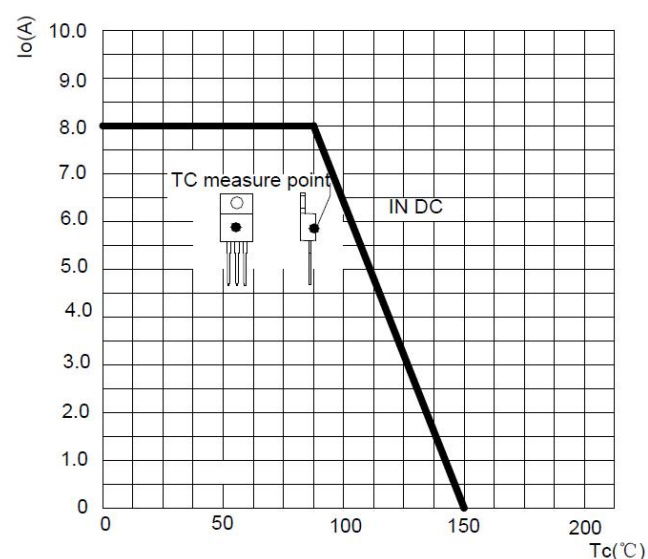


FIG2: Surge Forward Current Capability

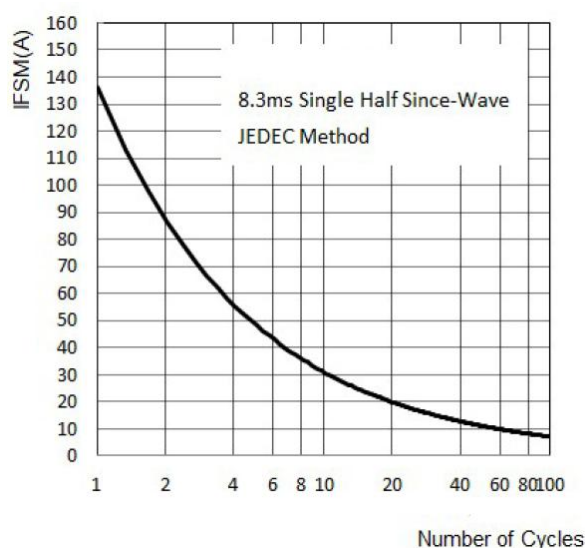


FIG3:Instantaneous Forward Voltage

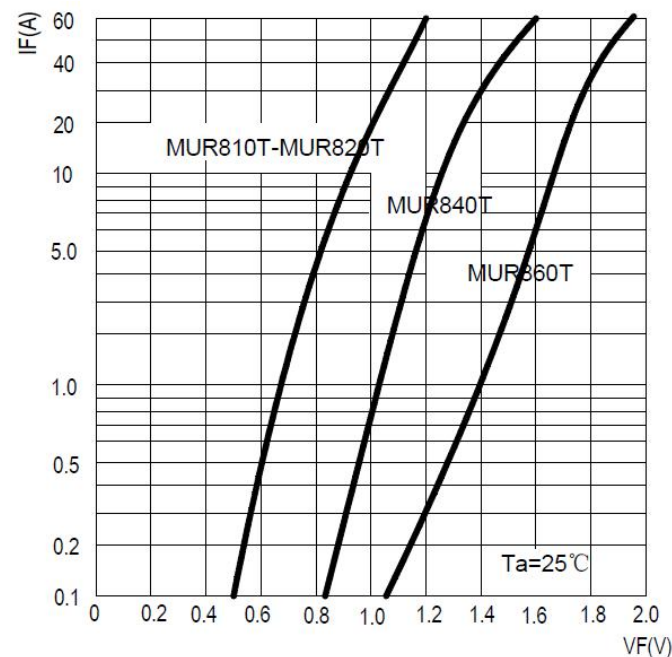


FIG4:Typical Reverse Characteristics

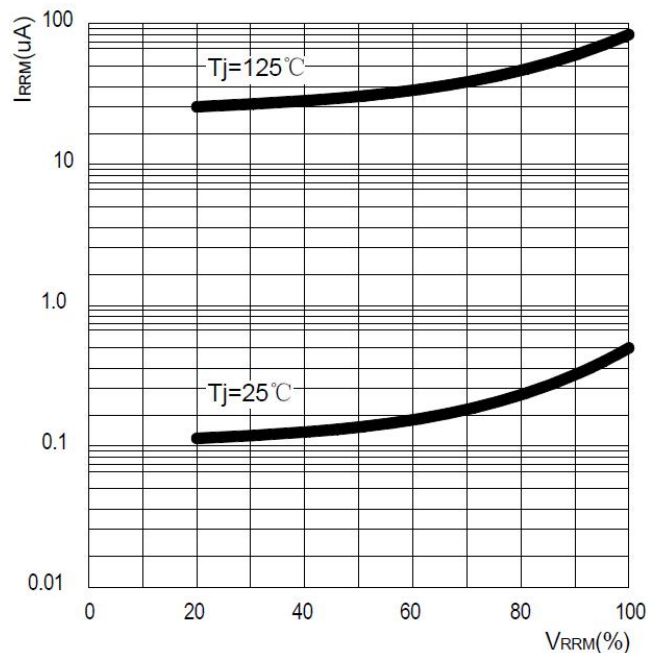
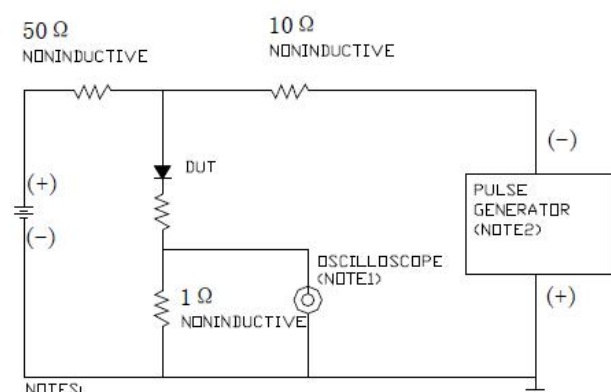
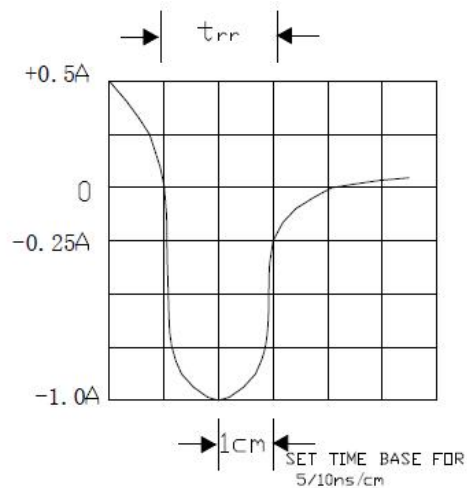


FIG5:Diagram of circuit and Testing wave form of reverse recovery time



NOTES:
1. Rise Time = 7ns max. Input Impedance = 1M Ω 22pf
2. Rise Time = 10ns max. Source Impedance = 50 Ω



MUR810 THRU MUR860

■ Ordering Information (Example)

PREFERED	PACKAGE CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR810~MUR860	TO-220AC	50	1000	5000	Tube

■ Outline Dimensions

