

Features

- High frequency operation
- · High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

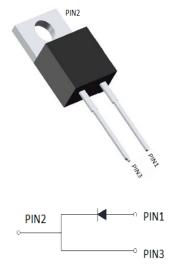
Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

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: As marked



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MUR810	MUR815	MUR820	MUR840	MUR860
Device marking code			MUR810	MUR815	MUR820	MUR840	MUR860
Repetitive Peak Reverse Voltage	VRRM	V	100	150	200	400	600
Average Rectified Output Current @60Hz half sine-wave, R-load, Tc(FIG.1)	I ₀	А	8				
Surge(Non-repetitive)Forward Current @60Hz half sine-wave,1 cycle, Ta=25℃	IFSM	А	100				
Current Squared Time @1ms≤t≤8.3ms Tj=25℃	l²t	A ² s	41				
Storage Temperature	T _{stg}	$^{\circ}$	-55 ~ +150				
Junction Temperature	Tj	$^{\circ}$	-55 ~ +150				

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MUR810	MUR815	MUR820	MUR840	MUR860
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=8.0A	0.975			1.3	1.5
Maximum DC reverse current at	IRRM1		VRM=VRRM T _a =25℃	10				
rated DC blocking voltage per diode	IRRM2	uA	VRM=VRRM T _a =125℃	500				
Reverse Recovery Time	Trr	ns	I _F =0.5A I _{RM} =1A I _{RR} =0.25A	50				

Thermal Characteristics ($T_a=25^{\circ}$ C Unless otherwise specified)

PA	RAMETER	SYMBOL	UNIT	MUR810	MUR815	MUR820	MUR840	MUR860
Thermal Resistance	Between junction and case	$R_{\theta J\text{-}C}$	°CMV			2.0		



Characteristics (Typical)

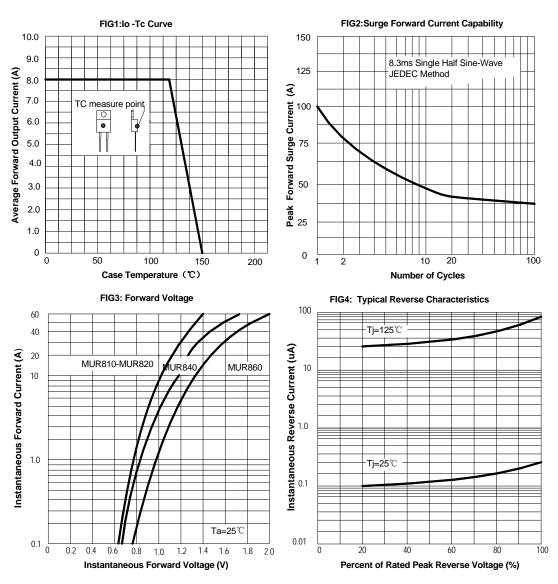
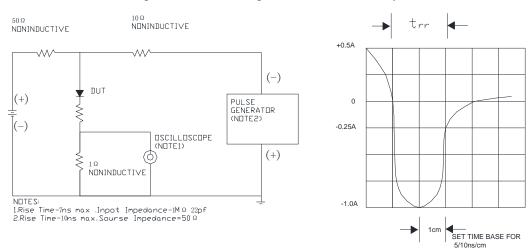
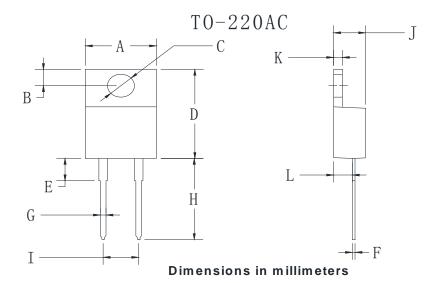


FIG.5 Diagram of circuit and Testing wave form of reverse recovery time





Outline Dimensions



TO-220AC							
Dim	Min	Max					
Α	9.5	10.9					
В	2.22	3.27					
С	3.34	4.31					
D	14.5	15.5					
Е	3.16	4.46					
F	0.28	0.64					
G	0.68	0.94					
Н	13.06	14.62					
I	4.55	5.60					
J	4.04	5.1					
K	1.14	1.4					
L	2.14	3.19					



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