TO-220AB Plastic-Encapsulate Diodes

Super Fast Recovery Rectifier Diodes

Features

- $I_{F(AV)}$ 16.0 A
- V_{RRM} 200V-600V
- High surge current capability
- Polarity: Color band denotes cathode

TO-220AB

Applications

- Rectifie r

Marking

- MUR16XX

XX：From 20 To 60

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	KMUR16		
				20CT	40CT	60CT
Repetitive Peak Reverse Voltage	V_{RRM}	V		200	400	600
Maximum RMS Voltage	V_{RMS}	V		140	280	420
Maximum DC Blocking Voltage	V_{DC}	V		200	400	600
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave，Resistance load，TL=50℃	16.0		
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave，1 cycle，Ta=25℃	100		
Operation Junction and Storage Temperature Range	T_J,T_{STG}	℃		-55 ~ +150		

Electrical Characteristics (T=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition		KMUR16		
					20CT	40CT	60CT
Maximum Peak Forward Voltage	V_{FM}	V	I_{FM}=8.0A		0.975	1.30	1.50
Maximum Peak Reverse Current	I_{RRM2}	μA	$V_{RM}=V_{RRM}$	T_J=25℃	10		
	I_{RRM1}			T_J=125℃	500		
Reverse Recovery time	t_{rr}	ns	I_F=0.5A,I_R=1.0A,I_{rr} =0.25A		25	50	

Typical Characteristics

FIG.1- CURRENT DERATING, CASE

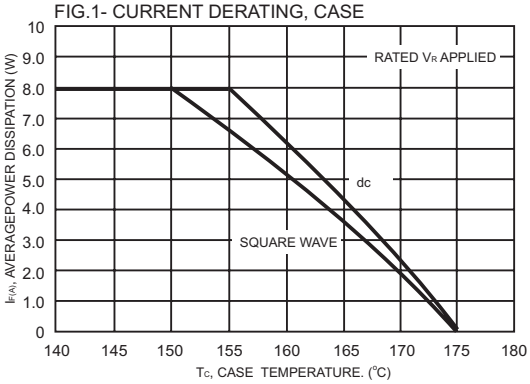


FIG.2- TYPICAL REVERSE CURRENT

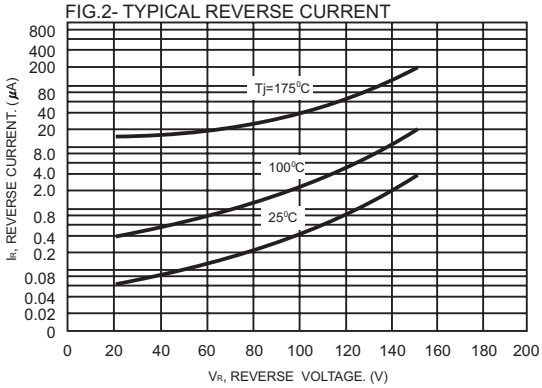


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

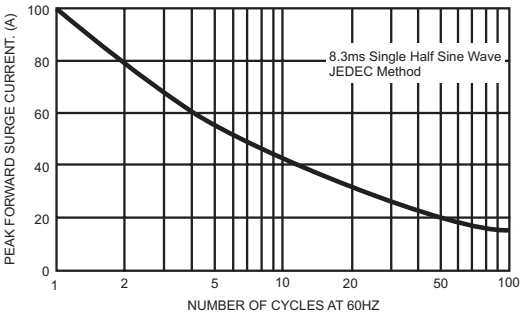


FIG.4- TYPICAL CAPACITANCE

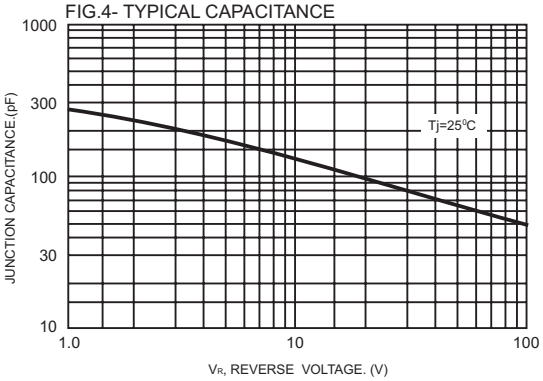


FIG.5- TYPICAL FORWARD VOLTAGE

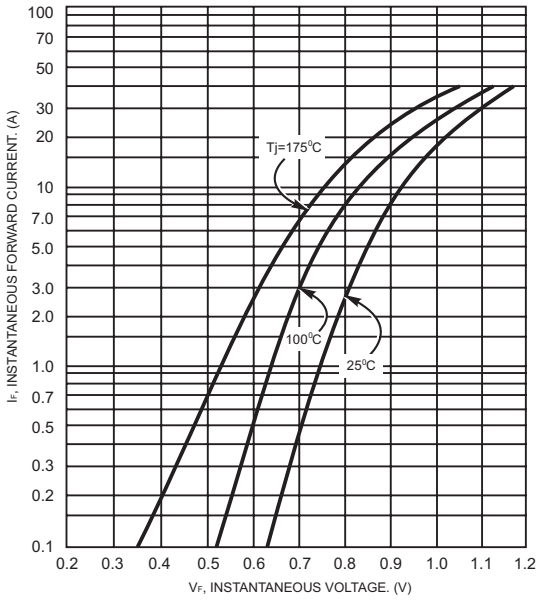
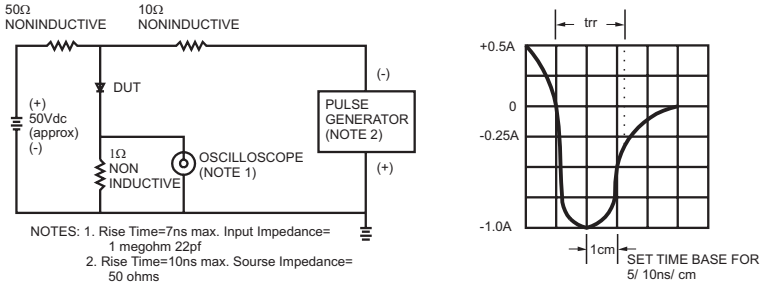
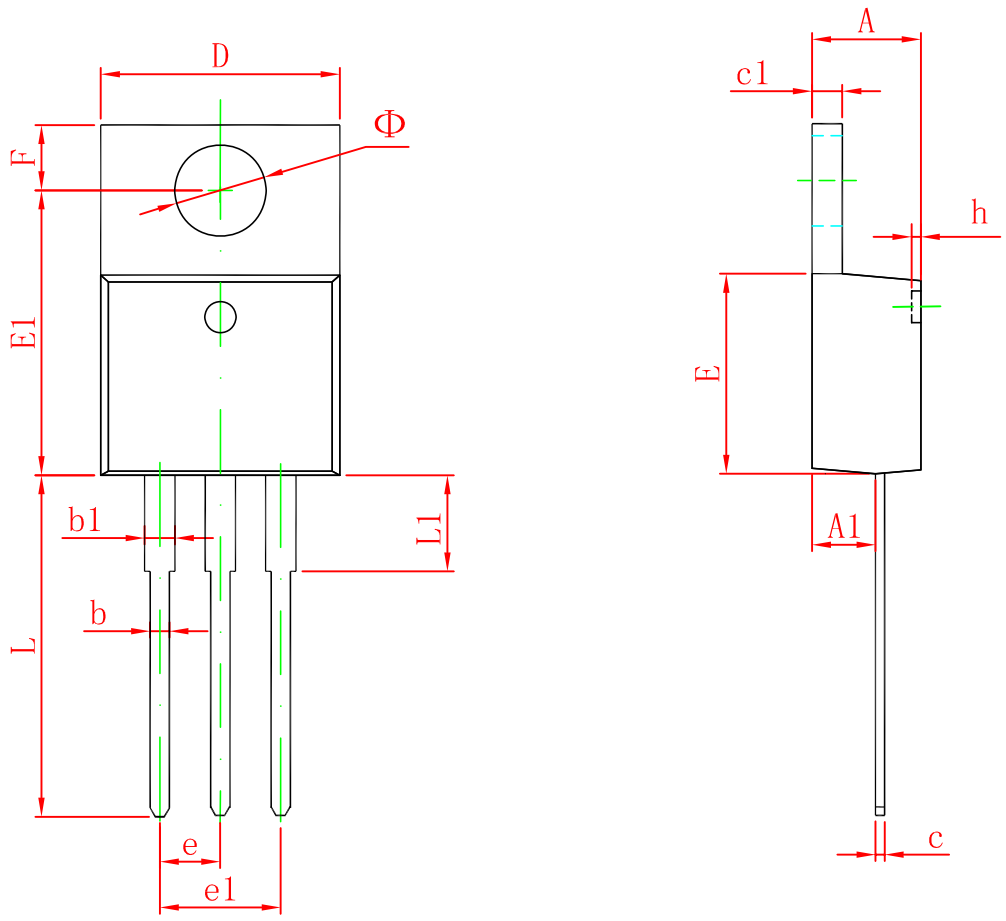


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance=
1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance=
50 ohms

TO-220AB Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	4.470	4.670	0.176	0.184
A1	2.520	2.820	0.099	0.111
b	0.710	0.910	0.028	0.036
b1	1.170	1.370	0.046	0.054
c	0.310	0.530	0.012	0.021
c1	1.170	1.370	0.046	0.054
D	10.010	10.310	0.394	0.406
E	8.500	8.900	0.335	0.350
E1	12.060	12.460	0.475	0.491
e	2.540 TYP		0.100 TYP	
e1	4.980	5.180	0.196	0.204
F	2.590	2.890	0.102	0.114
h	0.000	0.300	0.000	0.012
L	13.400	13.800	0.528	0.543
L1	3.560	3.960	0.140	0.156
Φ	3.735	3.935	0.147	0.155