

FEATURES

- Adopt FRED chip
- Low forward Voltage drop
- Fast reverse recovery time
- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

TYPICAL APPLICATIONS

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

MECHANICAL DATA

- **Package:** ITO-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:** As marked

MAXIMUM RATINGS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MUR1660FCT
Device marking code			MUR1660FCT
Repetitive Peak Reverse Voltage	VRRM	V	600
Average Rectified Output Current @60Hz sine wave, R-load, T _c (FIG.1)	I _O	A	16
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T _a =25°C	I _{FSM}	A	100
Current Squared Time @1ms≤t≤8.3ms T _j =25°C,	I ² t	A ² s	41
Storage Temperature	T _{stg}	°C	-55 ~ +150
Junction Temperature	T _j	°C	-55 ~ +150
Junction capacitance @4V,1MHz	C _j	pF	40

ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =8.0A @T _j =25°C	-	1.45	1.6
			I _{FM} =8.0A @T _j =150°C	-	1.15	1.3
DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	uA	V _{RM} =VRRM T _j =25°C	-	-	10
	I _{RRM2}		V _{RM} =VRRM T _j =150°C	-	40	200
Reverse Recovery Time	T _{rr}	ns	I _F =0.5A I _{RM} =1A I _{RR} =0.25A T _j =25°C	-	25	35
Peak recovery current	I _{RRM}	A	T _j =25°C	-	3.45	-
			T _j =125°C	-	6.25	-
Reverse recovery charge	Q _{rr}	nC	T _j =25°C	I _F =8A di/dt=-200A/us V _{RM} =200V	-	106.58
			T _j =125°C		-	283.26

■ THERMAL CHARACTERISTICS (Ta=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MUR1660FCT
Thermal Resistance	Between junction and case	R θ J-C	°CW	4.0
Thermal Resistance	Between junction and Air	R θ J-A	°CW	50

■ PACKAGING INFORMATION

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR1660FCT	Approximate 1.6	50	1000	5000	Tube

■ CHARACTERISTICS (TYPICAL)

FIG1:Io -Tc Curve

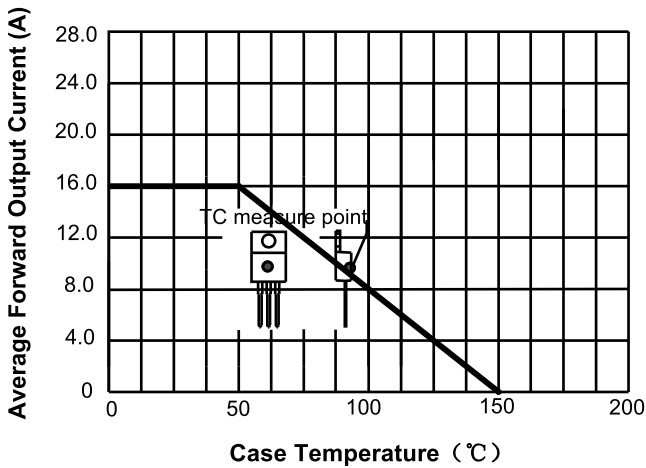


FIG2:Surge Forward Current Capability

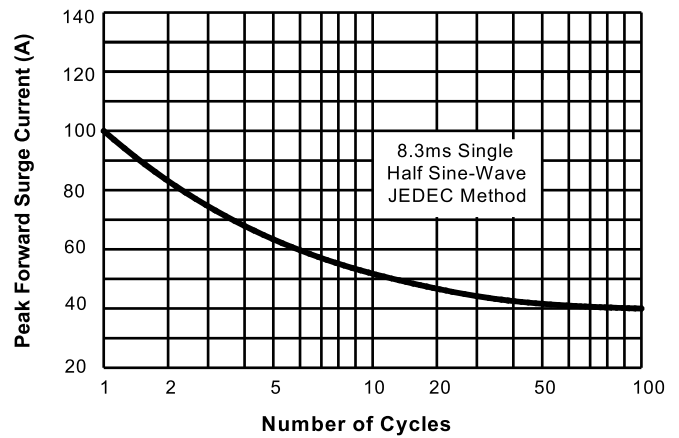


FIG3: Forward Voltage

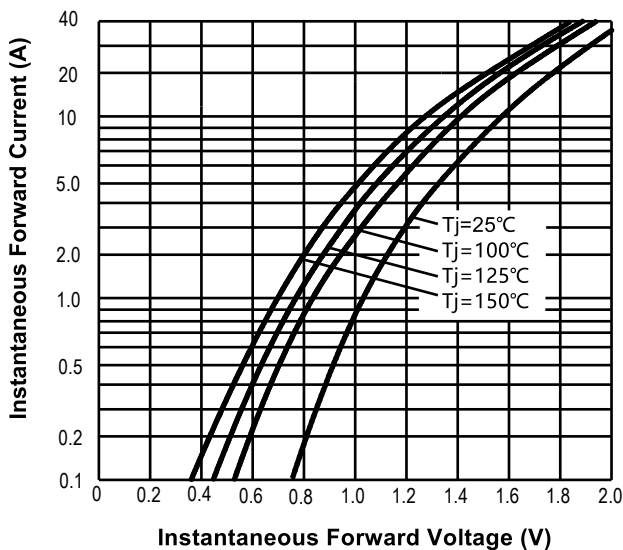


FIG.4: Instantaneous Reverse Characteristics

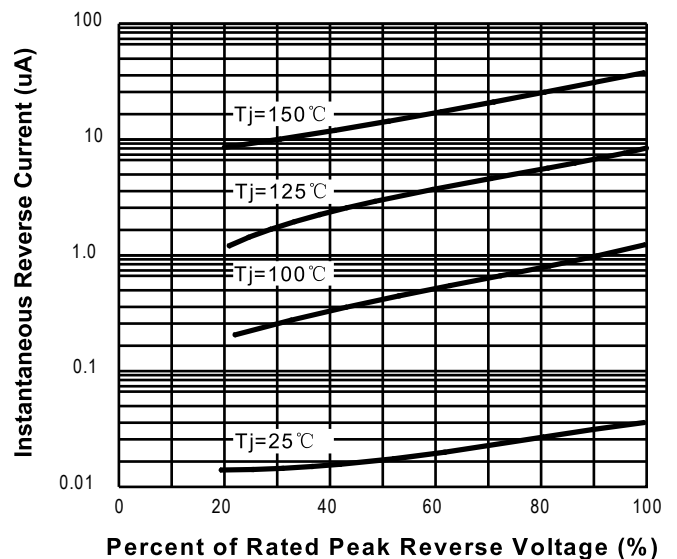
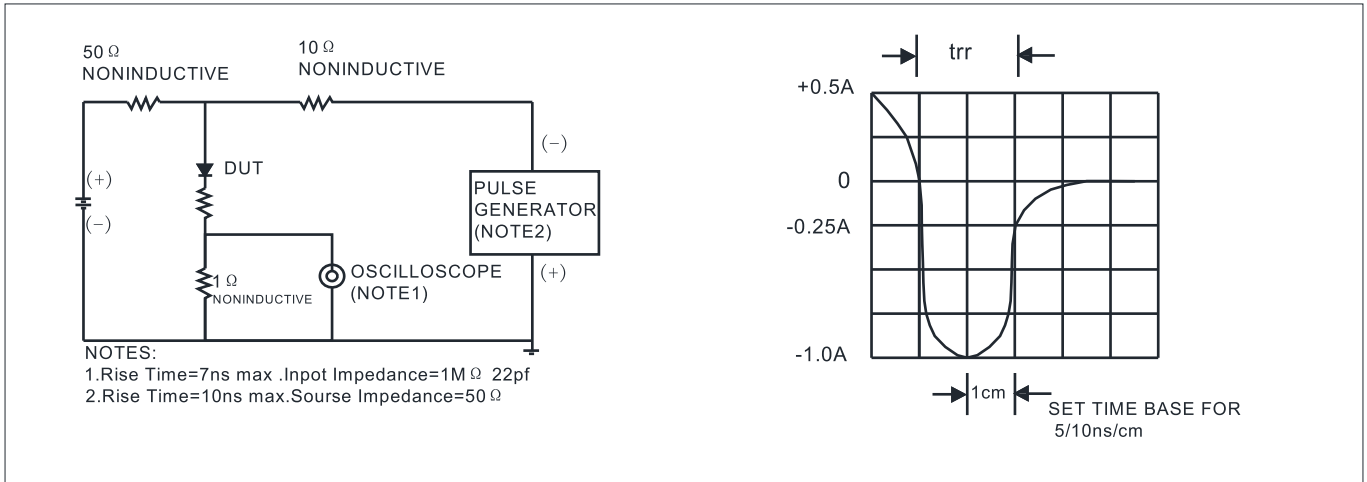
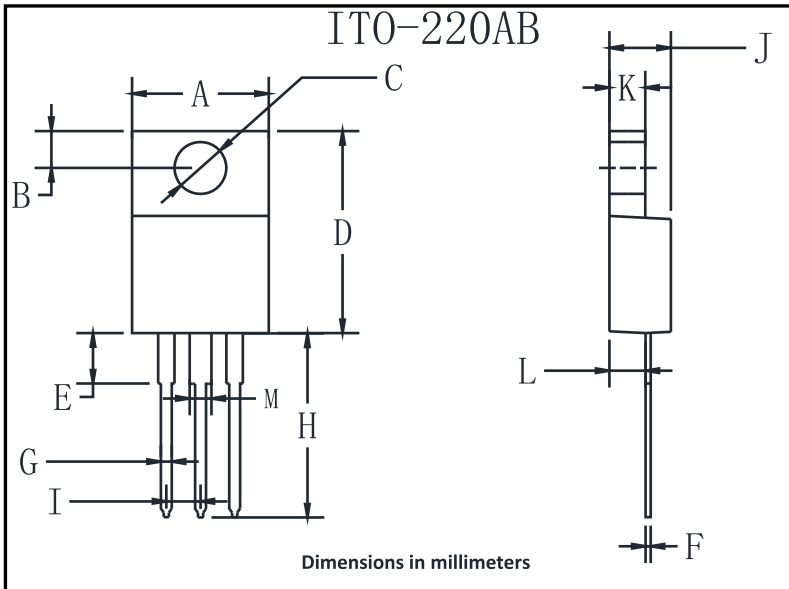


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ **OUTLINE DIMENSIONS**



ITO-220AB		
Dim	Min	Max
A	9.8	10.2
B	2.25	2.75
C	2.95	3.45
D	14.75	15.25
E	3.05	3.95
F	0.45	0.75
G	0.45	0.75
H	13.4	14.2
I	2.35	2.75
J	4.3	4.8
K	2.58	2.82
L	2.58	2.82
M	1.47	1.77