

MUR1060CT&MUR1060FCT

10.0AMPS. GLASS PASSIVATED FAST RECTIFIERS

FEATURE

- . Low forward voltage drop
- . High current capability
- . High reliability
- . High surge current capability
- . Epitaxial construction
- . High temperature soldering guaranteed
260°C /10seconds, 0.25"(6.35mm)from case.



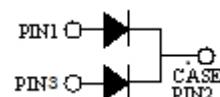
TO-220AB
MUR1060CT



ITO-220AB
MUR1060FCT

MECHANICAL DATA

- . Case: Molded with UL-94 Class V-0 recognized
Flame Retardant Epoxy
- . Mounting position: any



Single phase, half wave, 60Hz,resistive or inductive load.

For capacitive load, derate current by 20%

MAXIMUM RATINGS ($T_c=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	MUR1060CT&MUR1060FCT		Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600		V
Maximum RMS Voltage	V_{RMS}	420		V
Maximum DC blocking Voltage	V_{DC}	600		V
Maximum Average Forward Rectified Current at $T_c=100^\circ\text{C}$	$I_{F(AV)}$	5.0		A
Total device		10.0		
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	70.0		A
Maximum Reverse Recovery Time (Note 1)	t_{rr}	50		nS
Typical Junction Capacitance (Note 2)	C_J	80		pF
Operation Junction Temperature and Storage Temperature	T_J, T_{STG}	-55 to +150		°C
Maximum Mounting torque, M3 or 6-32 screw		1.1N•m (10 lbf•in)		

ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Typ	Max	Units
Maximum Forward Voltage (Per Leg) at 5.0A DC	V_F	1.4	1.7	V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	----	10.0 500.0	μA

THERMAL CHARACTERISTICS($T_c=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	MUR1060CT	MUR1060FCT	Units
Typical Thermal Resistance (Note 3)	$R_{(JC)}$	2.5	3.5	°C/W

Notes:

1. Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance From Junction to Case

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

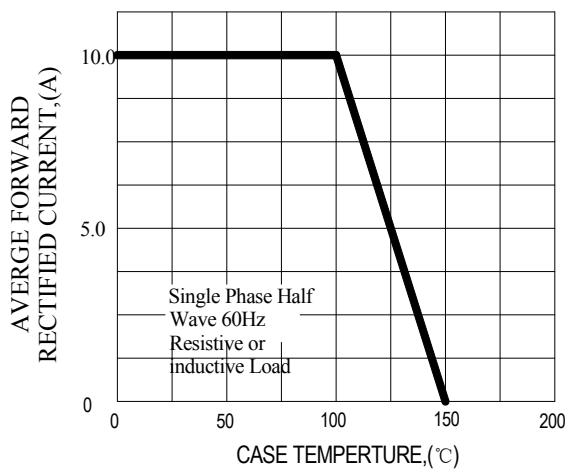


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

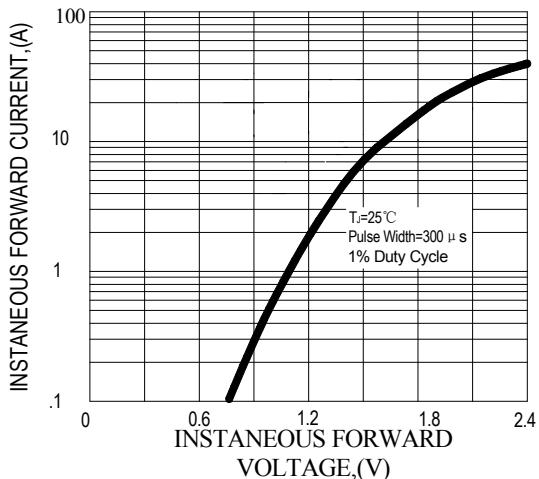


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

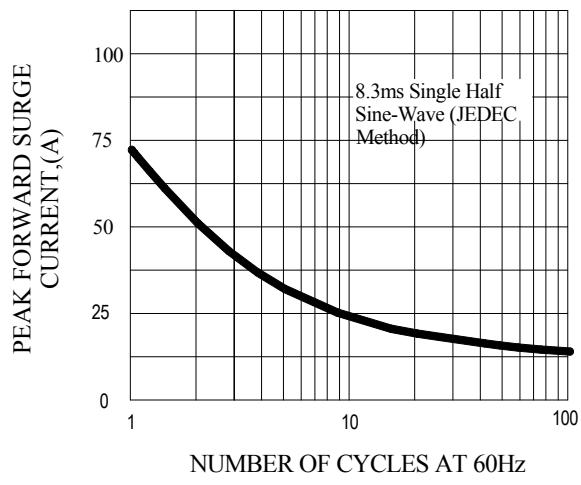


FIG.4-TYPICAL REVERSE CHARACTERISTICS

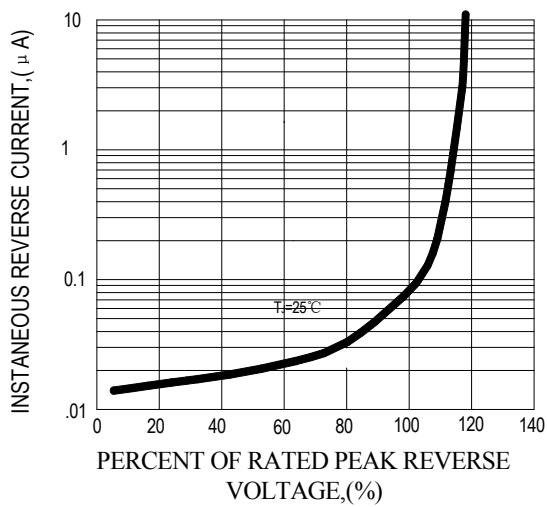
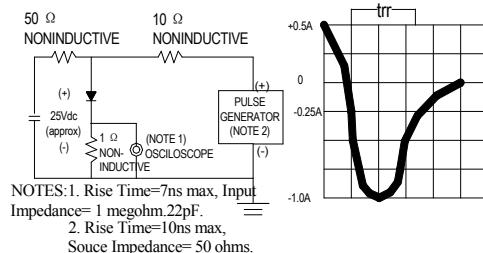
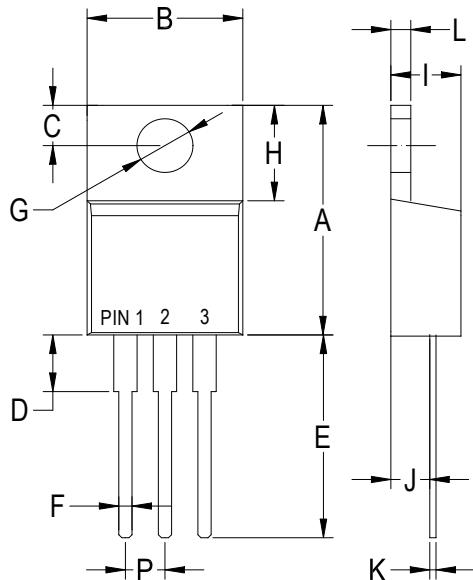


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



PACKAGE OUTLINE DIMENSIONS

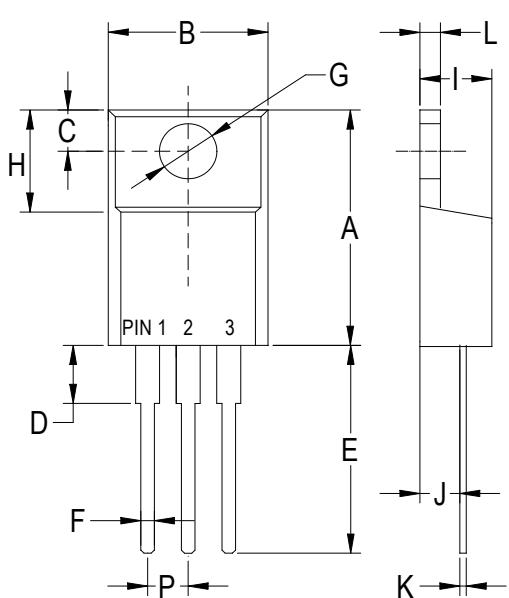
TO-220AB



TO-220AB		
Dim	Min	Max
A	.573 (14.55)	.603 (15.32)
B	—	.412 (10.5)
C	.103 (2.62)	.113 (2.87)
D	.140 (3.56)	.160 (4.06)
E	.510 (13.0)	.560 (14.3)
F	.027 (0.68)	.037 (0.94)
G	.148 (3.74)	.154 (3.91)
H	.230 (5.84)	.270 (6.86)
I	.175 (4.44)	.185 (4.86)
J	.100 (2.54)	.110 (2.79)
K	.014 (0.35)	.025 (0.64)
L	.045 (1.14)	.055 (1.40)
P	.095 (2.41)	.105 (2.67)

Dimensions in inches and (millimeters)

ITO-220AB



ITO-220AB		
Dim	Min	Max
A	.571 (14.5)	.610 (15.5)
B	.383 (9.72)	.406 (10.3)
C	.110 (2.80)	.126 (3.20)
D	.133 (3.38)	.162 (4.10)
E	.512 (13.0)	.551 (14.0)
F	.028 (0.70)	.035 (0.90)
G	.114 (2.90)	.138 (3.50)
H	.268 (6.80)	.291 (7.40)
I	.162 (4.10)	.185 (4.70)
J	.102 (2.60)	.110 (2.80)
K	.018 (0.45)	.026 (0.65)
L	.097 (2.46)	.113 (2.86)
P	.890 (2.25)	.113 (2.85)

Dimensions in inches and (millimeters)