

### Features

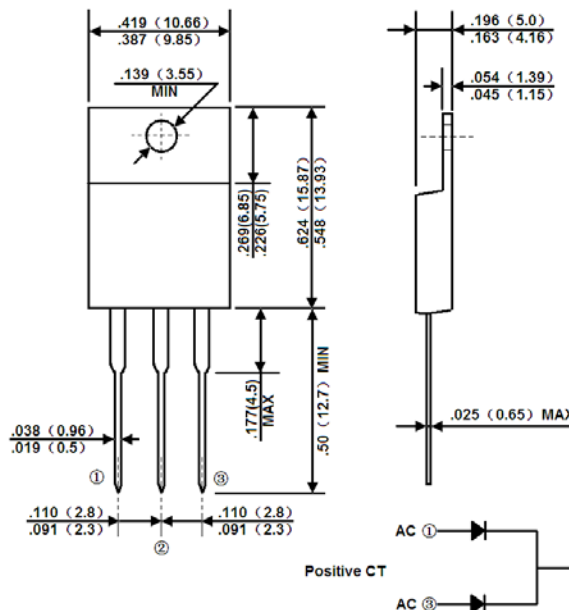
- \* Ultrafast 35 and 60 Nanosecond Recovery times
- \* 175°C operating Junction Temperature
- \* Popular TO-220AB Package
- \* Epoxy meets UL94, V0 @ 1/8"
- \* High temperature glass passivated junction
- \* High voltage capability to 600 volts
- \* Low leakage specified @ 150°C case temperature
- \* Current derating @ both case and ambient temperatures



**RoHS**  
COMPLIANT

### Package Outline Dimensions in inches (millimeters)

TO-220AB:



### Mechanical Data

- \* Case: Epoxy, molded
- \* Terminal: Pure tin plated, lead free
- \* Lead temperature for soldering purposes:  
260°C Max. for 10 seconds
- \* Finish: all external surfaces corrosion resistant and terminal leads are readily solderable

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	MUR1620CT	MUR1640CT	MUR1660CT	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	140	280	420	V
Maximum D.C Blocking Voltage	$V_{DC}$	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	16			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	100			A
Maximum Instantaneous Forward Voltage (Note 1) @ $I_F=8A$ , $T_A=25^\circ C$ @ $I_F=8A$ , $T_A=150^\circ C$	$V_F$	0.975 0.895	1.3 1.1	1.5 1.2	V
Maximum D.C Reverse Current @ $T_A=25^\circ C$ at Rated D.C Blocking Voltage @ $T_A=125^\circ C$	$I_R$	5 250	10 500		$\mu A$
Maximum Reverse Recovery Time (Note 2)	$T_{rr}$	25	50		nS
Typical Thermal Resistance	$R_{\theta JC}$	3.0	2.0		$^\circ C/W$
Operating and Storage Temperature Range	$T_J/T_{STG}$	-55 to +175			$^\circ C$

Note:1、Pulse Test with PW=300 usec, 1% Duty Cycle 2、Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $IRR=0.25A$

### Ratings and Characteristic Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

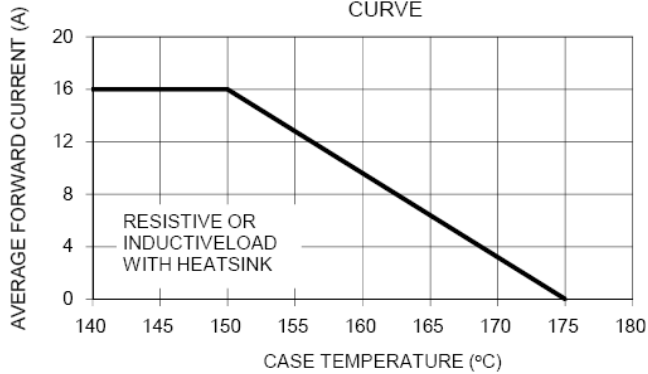


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

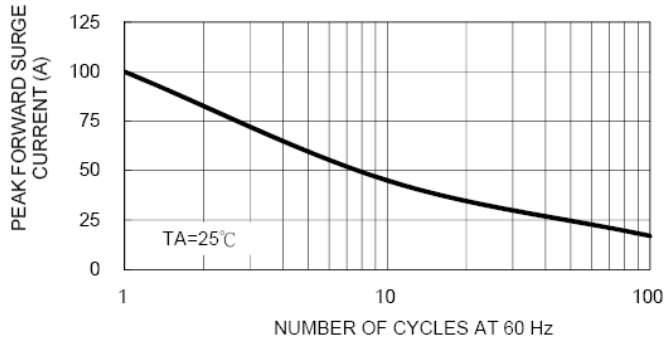


FIG. 5 TYPICAL JUNCTION CAPACITANCE

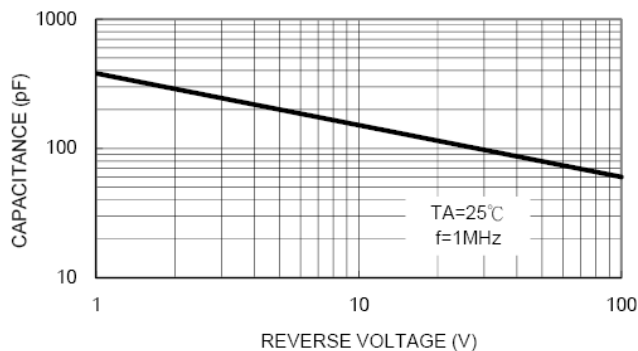


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

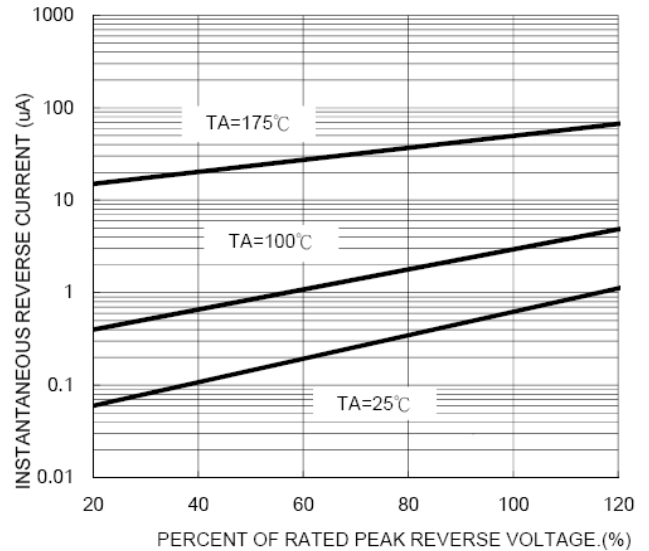


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

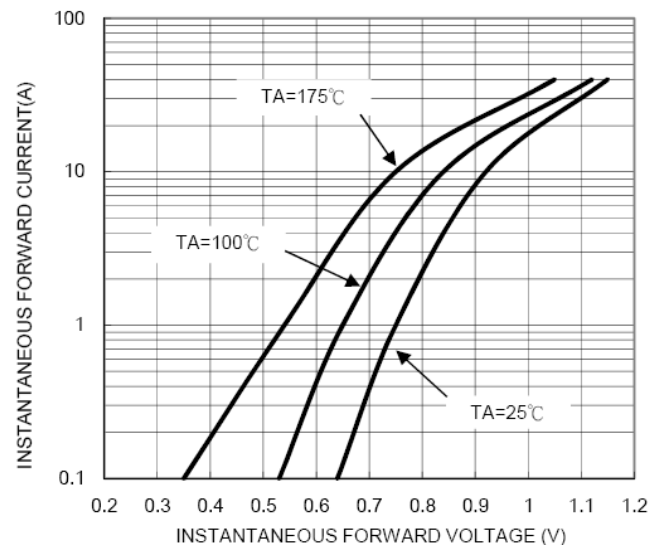
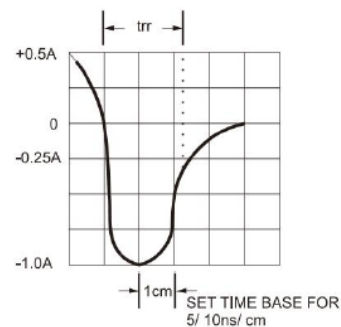
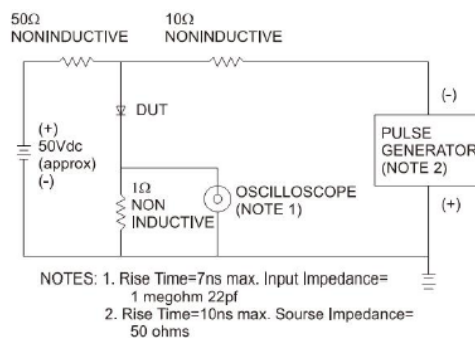


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





## MUR1620CT THRU MUR1660CT

*Switch mode Power Rectifiers*

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### Ordering Information

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Part No.	Package	Packing
MUR1620CT~MUR1660CT	TO-220AB	50pcs/Tube