

## SUPER FAST RECTIFIERS

VOLTAGE RANGE: 100--- 600 V  
CURRENT:16.0 A

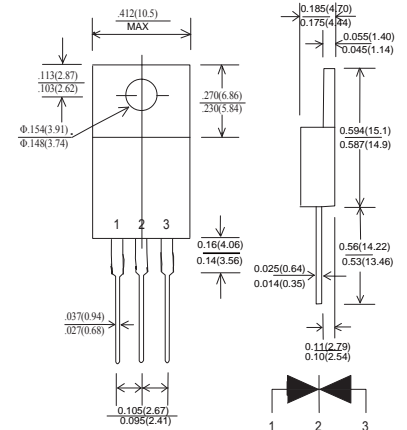
### Features

- Low forward voltage drop
- High current capability
- High reliability
- Low Power Loss, High Efficiency
- Ultrafast 35 and 60 Nanosecond Recovery times

### Mechanical Data

- Case: Molded Plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end

### TO-220AB



Unit: inch (mm)

## MAXIMUM RATINGS AND 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	MUR 1610CT	MUR 1620CT	MUR 1640CT	MUR 1660CT	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	100	200	400	600	V
Maximum RMS Voltage	VRMS	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	100	200	400	600	V
Maximum Average Forward Rectified Current	IF	16				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	100				A
Maximum Instantaneous Forward Voltage @8A	VF	1.0	1.3	1.7	v	
Maximum Reverse Current @ Rated VR TA=25 °C TA=125 °C	IR	10 500				uA
Typical Junction Capacitance (Note 1)	Cj	150				pF
Typical Thermal Resistance(Note 2)	RθJA	30				°C/w
Operating and Storage Temperature Range	TJ	-65~+150				°C
Maximum reverse recovery time (Note 3)	Trr	50				nS

NOTE1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

NOTE2. Leads maintained at ambient temperature at a distance of 9.5mm from the case

NOTE3. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A. See figure 5.

# RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

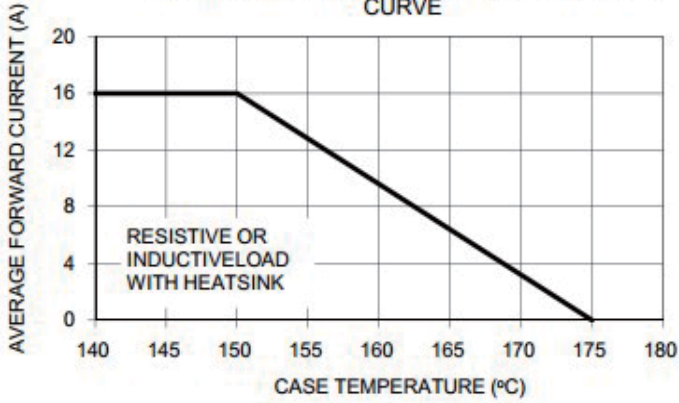


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

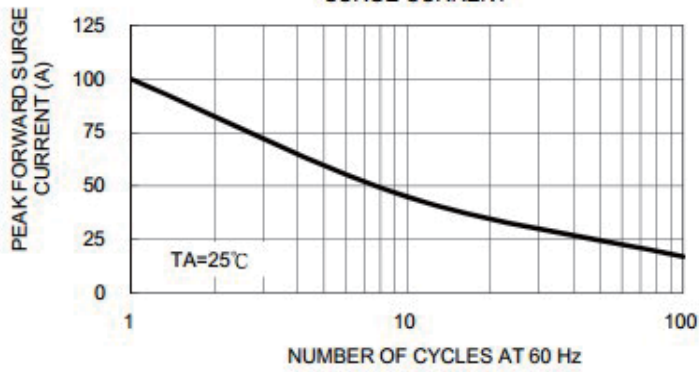


FIG. 5 TYPICAL JUNCTION CAPACITANCE

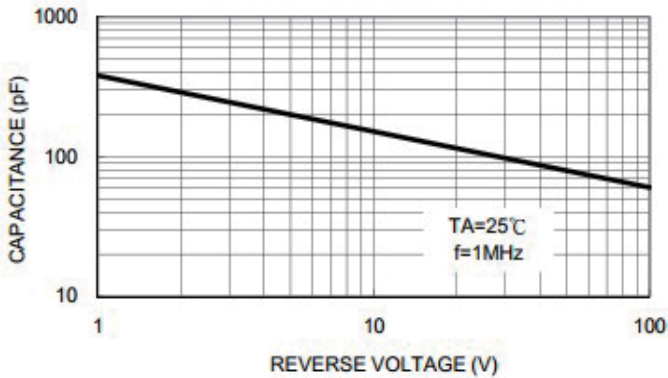


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

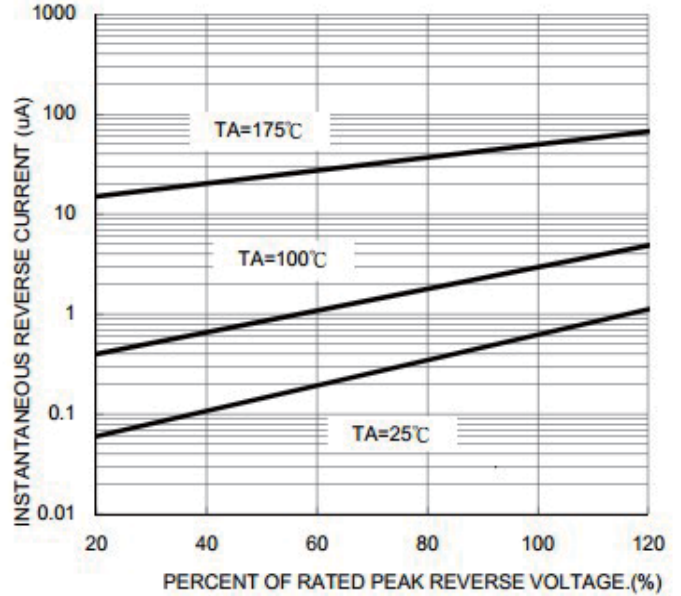


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

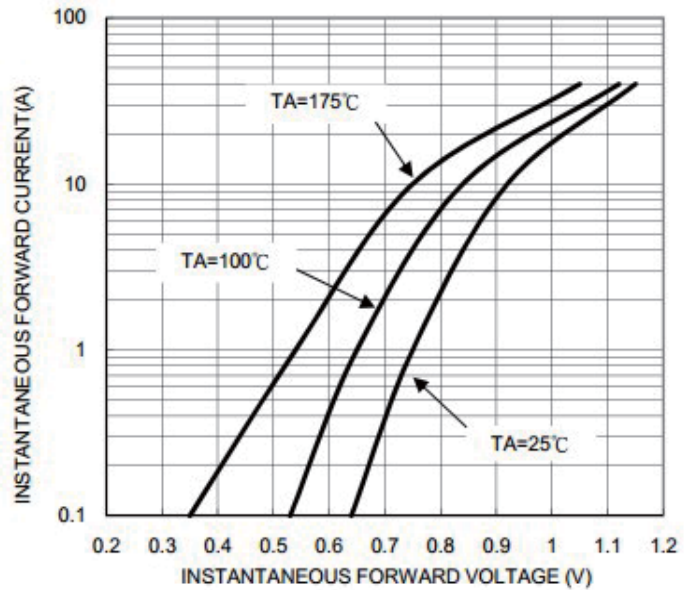


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM