

## MUR2005(F)CT-MUR2060(F)CT 20.0Amp Super Fast Rectifiers

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ Low forward voltage,high efficiency.
- ◆ For use in low voltage,high frequency inverters.
- ◆ Dual rectifier construction,positive center tap.
- ◆ High temperature soldering guaranteed:  
250°C/10 seconds at terminals

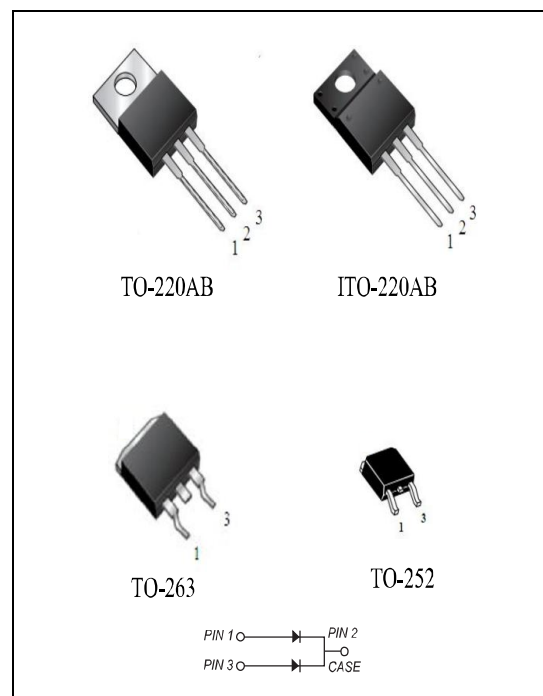
### Mechanical Data

**Case:** JEDEC (I)TO-220AB molded plastic body

**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026

**Finish :**All external surfaces corrosion resistant and terminal leads are readily solderable.

**Mounting Position:** Any



### Maximum Ratings And Electrical Characteristics

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

	SYMBOLS	MUR 2005(F)CT	MUR 2010(F)CT	MUR 2020(F)CT	MUR 2030(F)CT	MUR 2040(F)CT	MUR 2060(F)CT	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	300	400	600	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	210	280	420	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	300	400	600	VOLTS
Maximum average forward rectified current at $T_L=60^\circ C$	$I_{(AV)}$	20.0						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	100						Amps
Maximum instantaneous forward voltage at 10.0A	$V_F$	0.98		1.4		2.2		Volts
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	$I_R$	10.0 500.0						$\mu A$
Maximum reverse recovery time (NOTE 1)	$t_{rr}$	35						nS
Typical junction capacitance (Note 2)	$C_J$	150						pF
Typical thermal resistance	$R_{\theta JA}$	56						$^\circ C/W$
Storage temperature range & Operating junction	$T_J, T_{STG}$	-55 to +175						$^\circ C$

**Note:**1.Reverse recovery time test condition:  $I_F=0.5A$   $I_R=1.0A$   $I_{rr}=0.25A$

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

# Ratings And Characteristic Curves

## MUR 2005(F)CT THRU MUR2060(F)CT

FIG. 1- FORWARD CURRENT DERATING CURVE

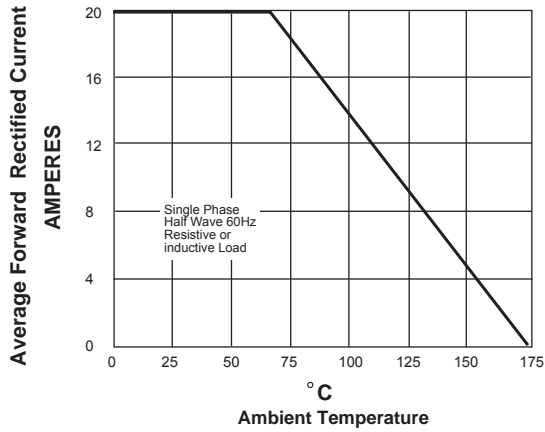


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

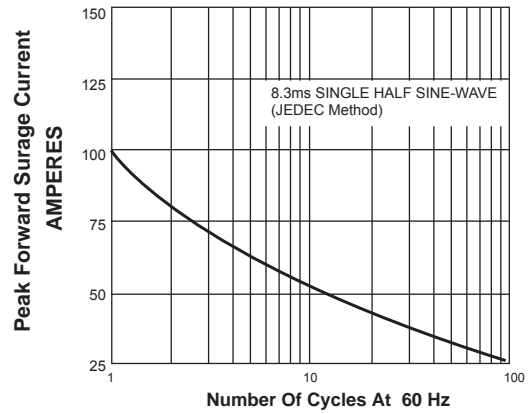


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

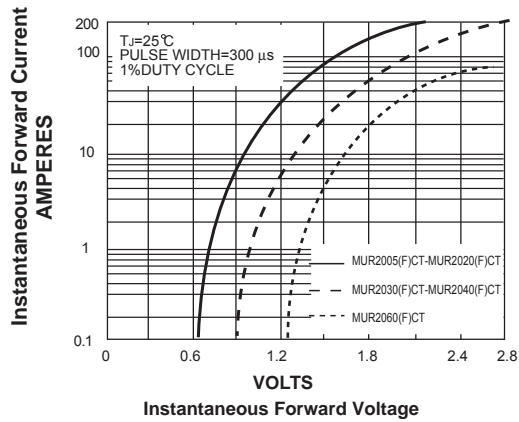
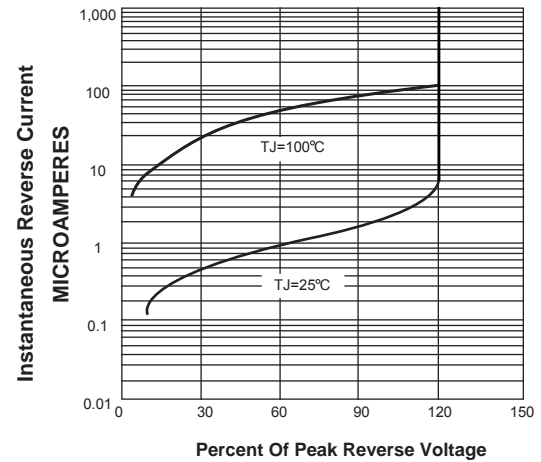
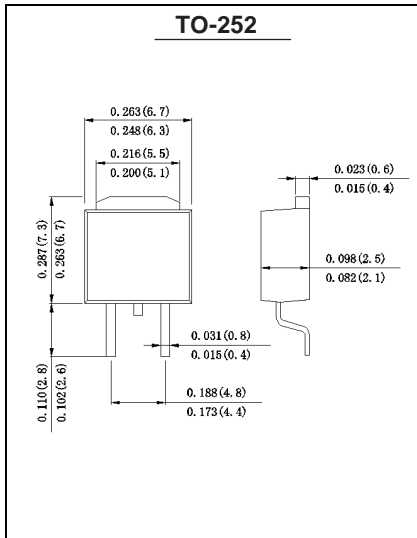
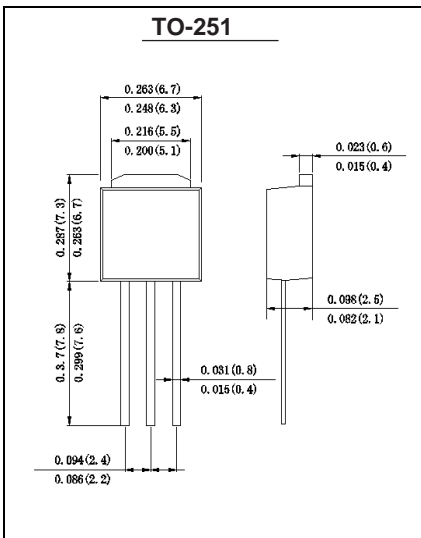
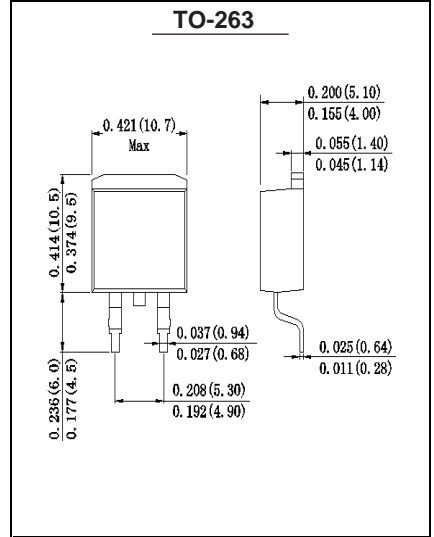
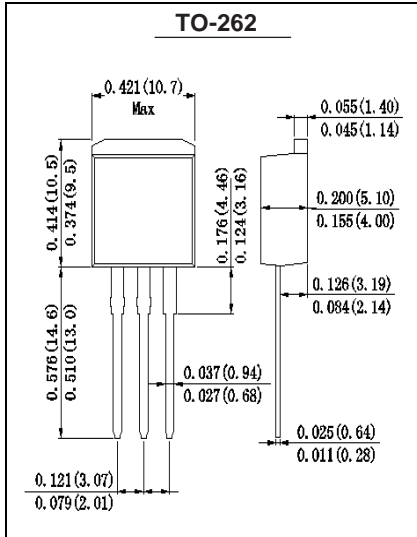
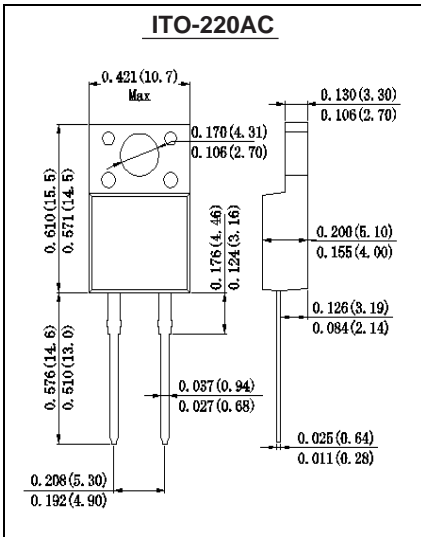
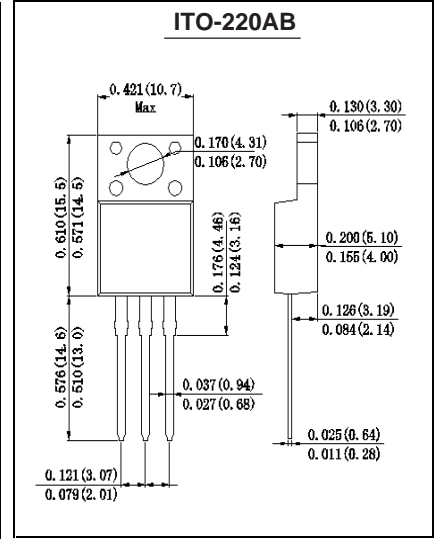
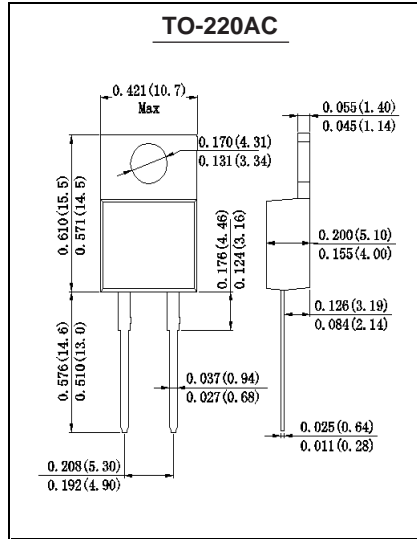
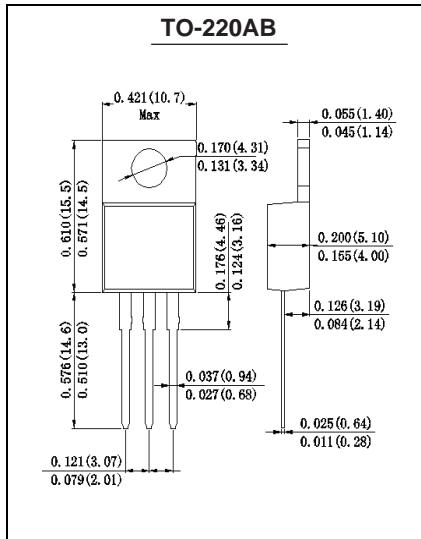


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



## Outline Drawing



**Note:** All dimensions in inches and (millimeters)