

MUR1005(F)CT-MUR1060(F)CT 10.0Amp 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

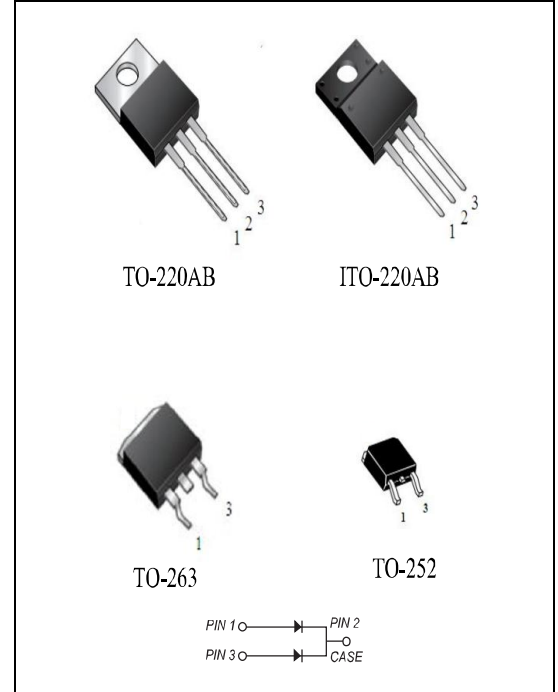
Mechanical Data

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 1005(F)CT	MUR 1010(F)CT	MUR 1020(F)CT	MUR 1040(F)CT	MUR 1050(F)CT	MUR 1060(F)CT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	500	600	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	350	420	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	500	600	VOLTS
Maximum average forward rectified current at $T_L=60^\circ\text{C}$	$I_{(AV)}$	10.0						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 5.0A	V_F		1.25		1.4		1.8	Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R			10.0			500.0	μA
Maximum reverse recovery time (NOTE 1)	t_{rr}		35			60		nS
Typical junction capacitance (Note 2)	C_J			150				pF
Typical thermal resistance	$R_{\theta JA}$			63				$^\circ\text{C/W}$
Storage temperature range & Operating junction	T_J, T_{STG}			-55 to +150				$^\circ\text{C}$

Note: 1.Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

MUR 1005(F)CT THRU MUR1060(F)CT

FIG. 1- FORWARD CURRENT DERATING CURVE

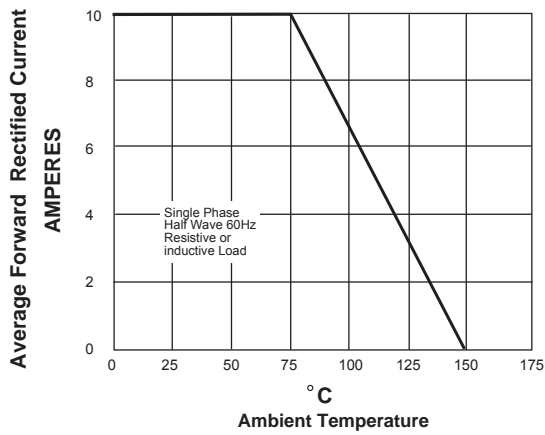


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

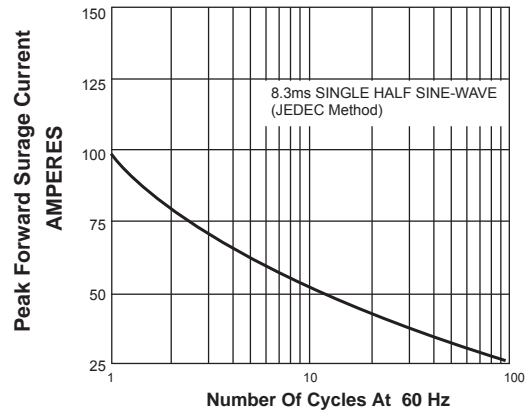


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

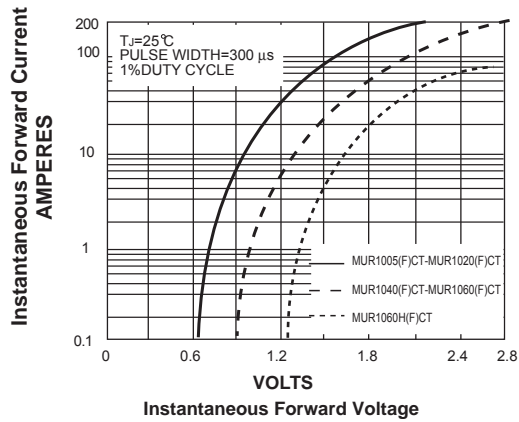
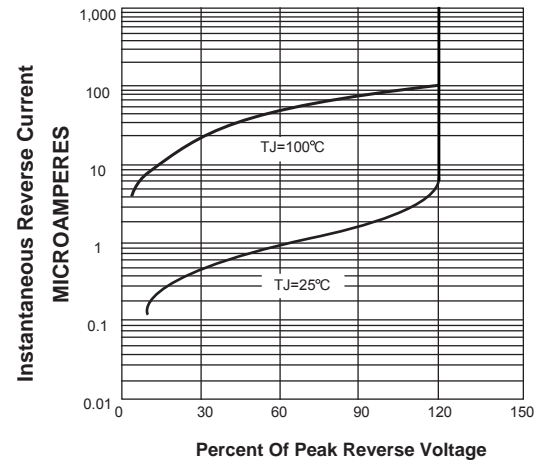
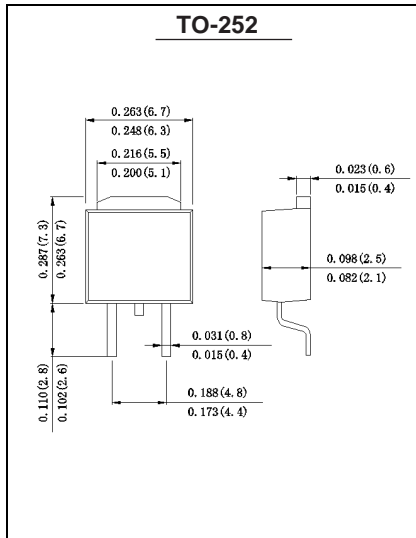
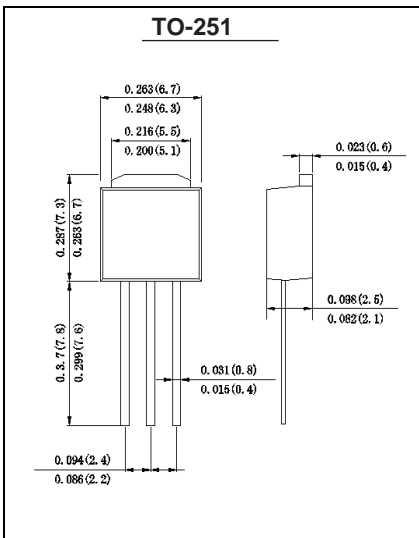
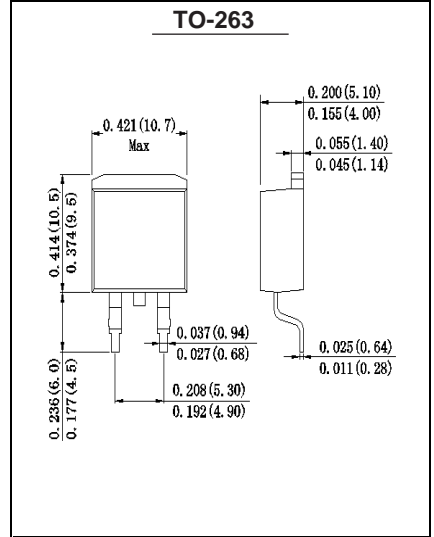
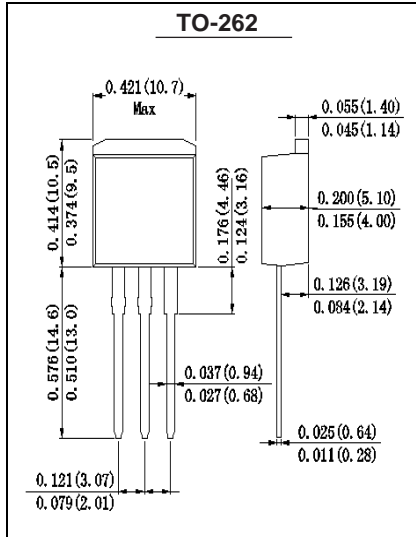
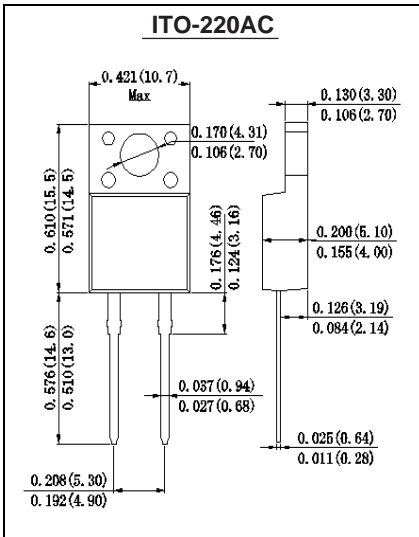
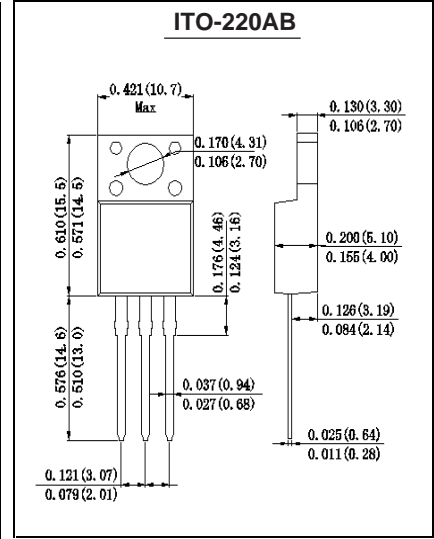
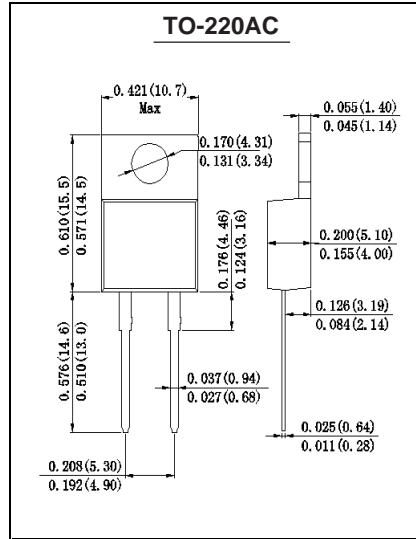
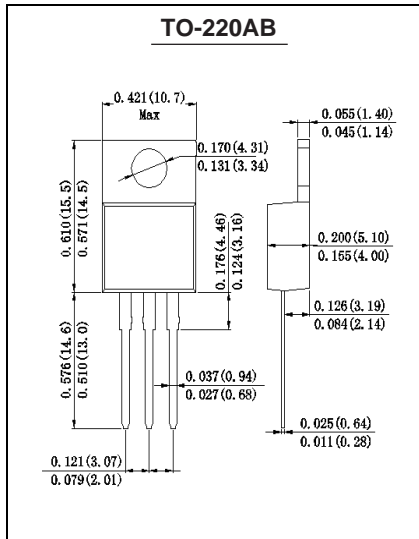


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Outline Drawing



Note: All dimensions in inches and (millimeters)