

SF1605(F)CT-SF1660(F)CT 16.0Amp 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

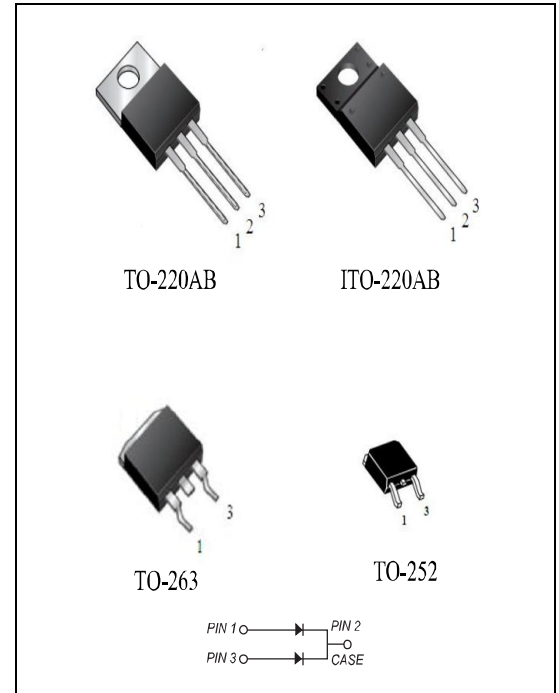
Mechanical Data

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	SF 1605(F)CT	SF 1610(F)CT	SF 1620(F)CT	SF 1640(F)CT	SF 1650(F)CT	SF 1660(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 $T_L=60^\circ C$	$I_{(AV)}$	16.0						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120						Amps
Maximum instantaneous forward voltage at 8.0A	V_F	0.95		1.25		1.7		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						μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	35						nS
Typical junction capacitance (Note 2)	C_J	100						pF
Typical thermal resistance	$R_{\theta JA}$	52						$^\circ C/W$
Storage temperature range & Operating junction	T_J, T_{STG}	-55 to +150						$^\circ C$

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

SF 1605(F)CT THRU SF1660(F)CT

FIG. 1- FORWARD CURRENT DERATING CURVE

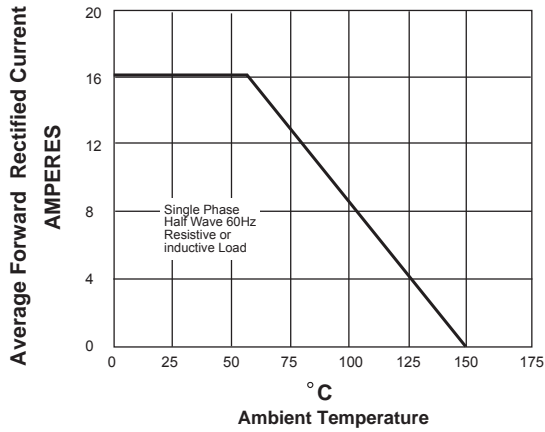


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

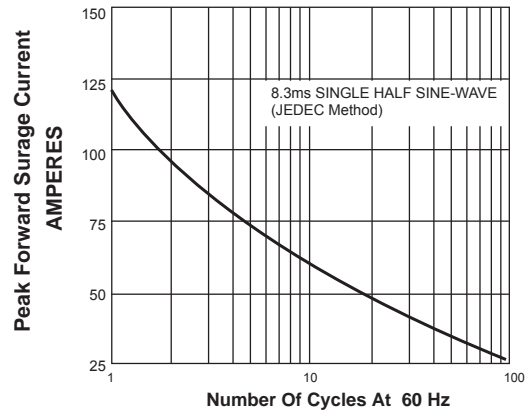


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

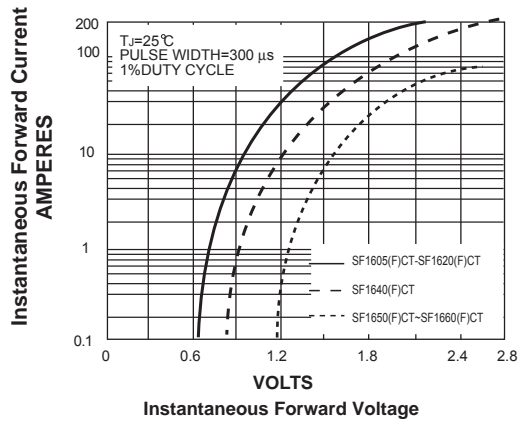
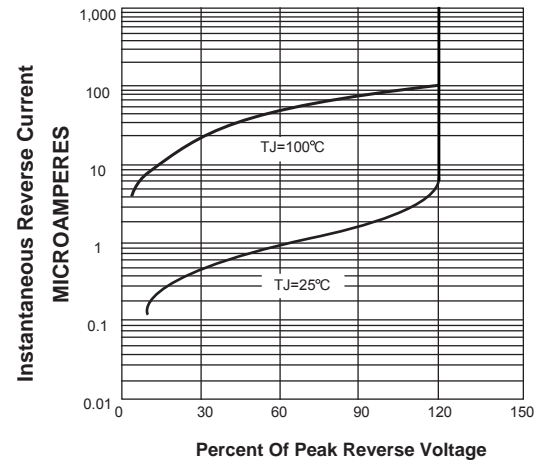
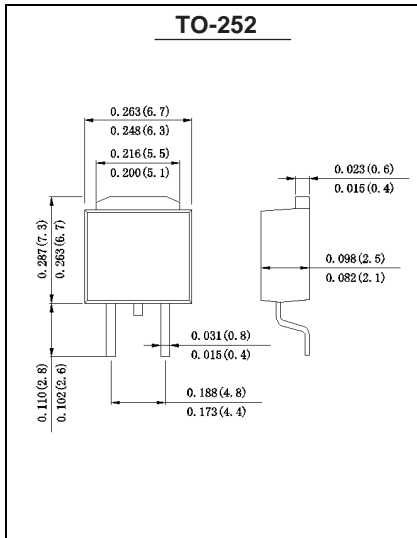
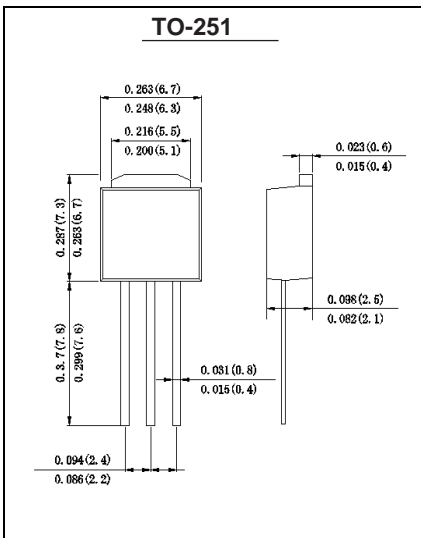
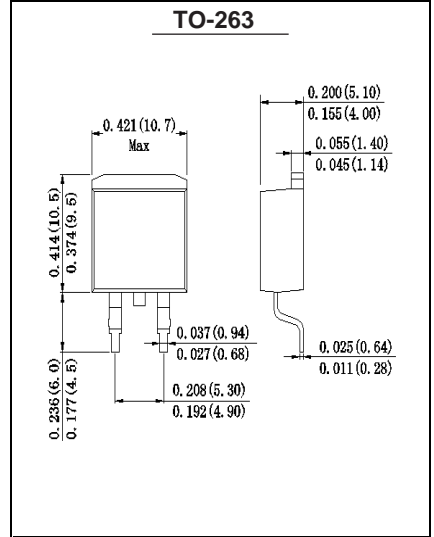
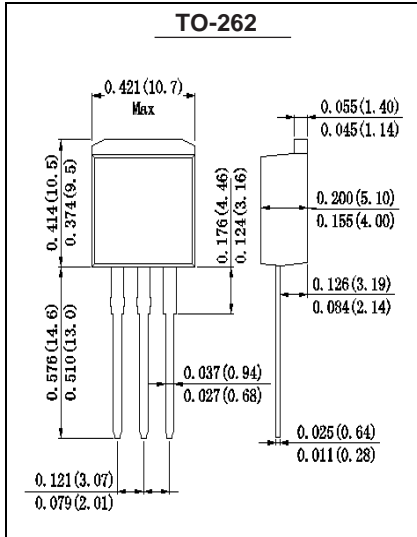
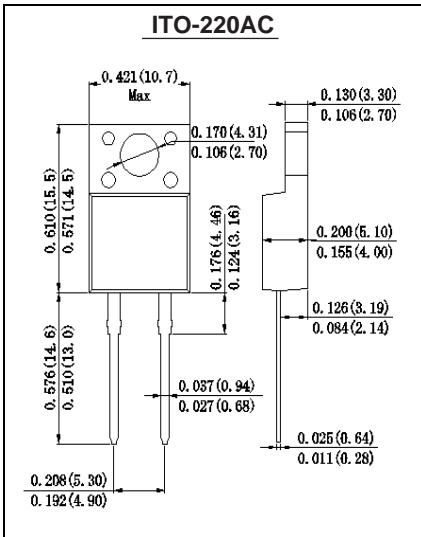
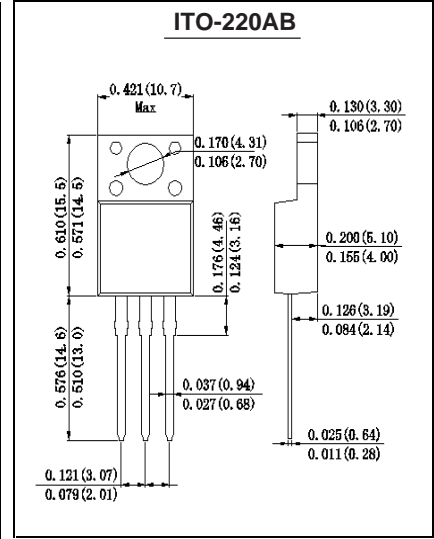
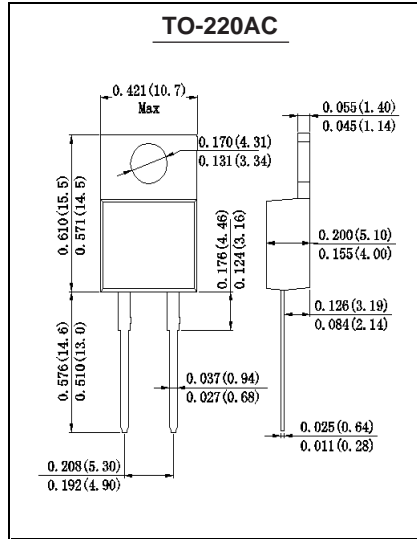
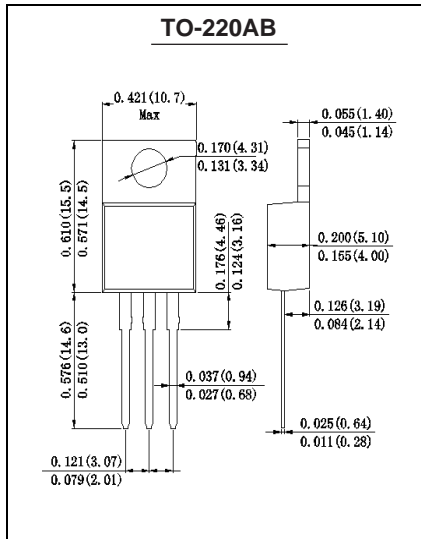


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Outline Drawing



Note: All dimensions in inches and (millimeters)