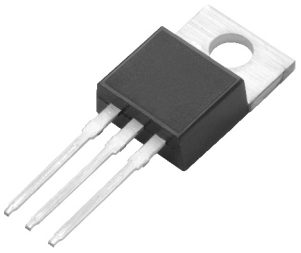
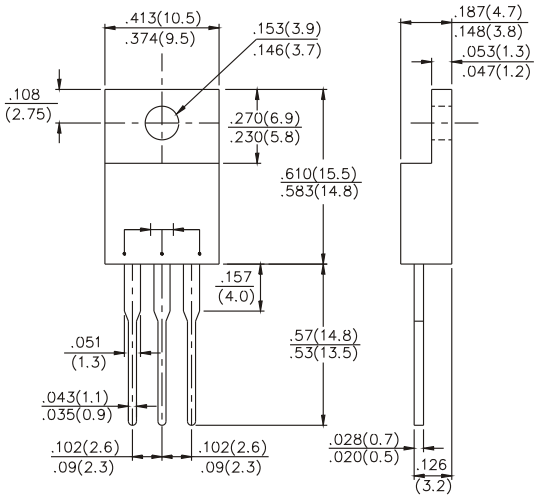
SF2001CT thru SF2007CT

SUPERFAST RECOVERY RECTIFIER

VOLTAGE - 50 TO 600 VOLTS CURRENT - 20 AMPERES



TO-220AB



Dimensions in inches and (millimeters)

FEATURES

- High current capability
- High surge current capability
- Low reverse current
- Component in accordance to RoHS 2002/95/EC

MECHANICAL DATA

- Case: TO-220AB
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.948 grams (approximate)

MAXIMUM RATIXGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SF 2001CT	SF 2002CT	SF 2003CT	SF 2004CT	SF 2005CT	SF 2006CT	SF 2007CT	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current(Total) (Per Leg)	I_F	20.0 10.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0							A
Maximum instantaneous I_F=10A @ 25°C	V_F	1.00				1.35		1.75	V
Maximum DC reverse current @ TA=25°C at rated DC blocking voltage @ TA=100°C	I_R	10 200							uA
Maximum Reverse Recovery Time(NOTE2)	Trr	35				50			ns
Typical junction capacitance(NOTE1)	C_J	50							pF
Typical thermal resistance	$R_{\theta JA}$	10							°C/W
	$R_{\theta JC}$	3							
Operating temperature range	T_J	-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150							°C

NOTES: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC
2.Measured with IF=0.5A, IR=1A, IRR=0.25A

SUPERFAST RECOVERY RECTIFIER

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

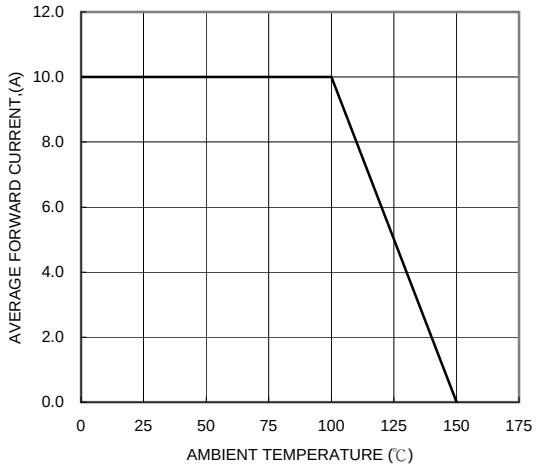


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

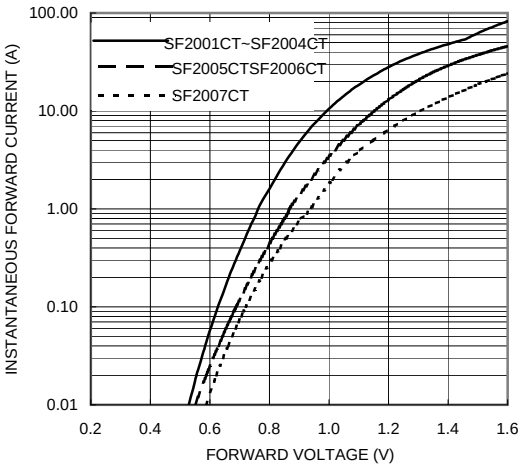


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

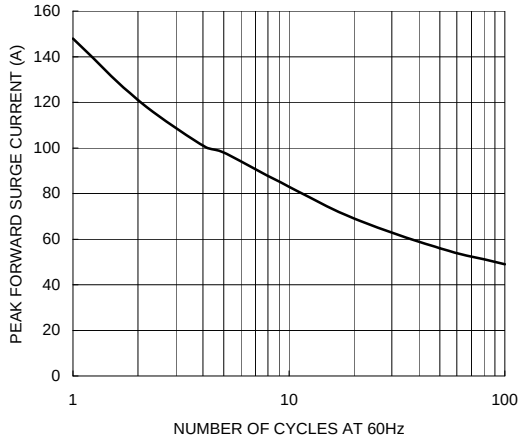


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

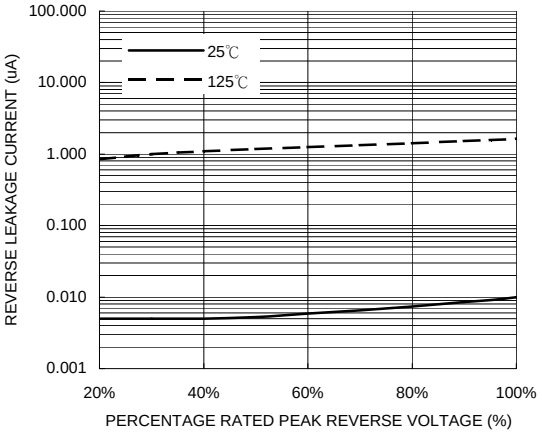


FIG. 5-TYPICAL JUNCTION CAPACITANCE

