



DATA SHEET

SEMICONDUCTOR

FG1001CT~FG1007CT

FAST RECOVERY GLASS PASSIVATED RECTIFIER VOLTAGE RANGE 50 to 1000 Volts CURRENT 10.0 Amperes



FEATURES

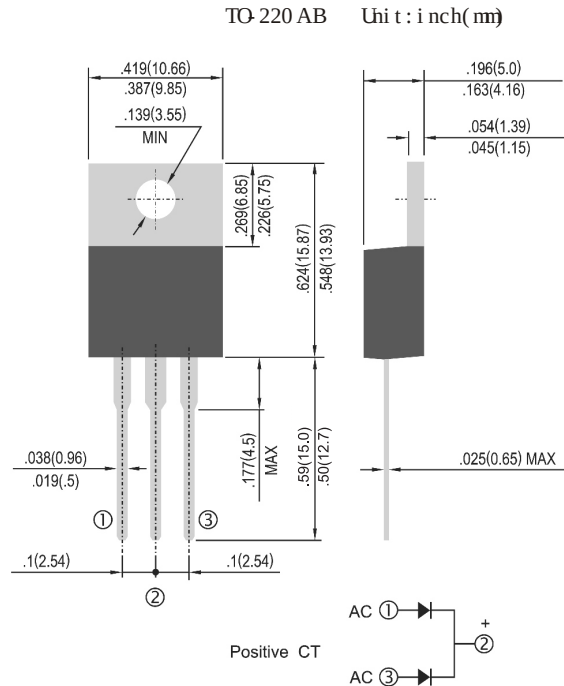
- Fast switching
- Low leakage
- Low forward voltage drop
- High current capability
- High surge capability
- High reliability
- High temperature soldering : 260 °C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request.

MECHANICAL DATA

- Case: TO-220AB molded plastic
- Epoxy: Device has UL flammability classification 94 V-0
- Lead: MIL-STD-202E method 208C guaranteed
- Mounting position: Any
- Weight: 2.24 grams
- Polarity: As marking

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	FG1001CT	FG1002CT	FG1003CT	FG1004CT	FG1005CT	FG1006CT	FG1007CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at TC = 75°C	I _O	10.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	125							Amps
Typical Thermal Resistance (Note 3)	R _{θJC}	3							°C/W
Typical Junction Capacitance (Note 2)	C _J	50							pF
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	FG1001CT	FG1002CT	FG1003CT	FG1004CT	FG1005CT	FG1006CT	FG1007CT	UNITS
Maximum Instantaneous Forward Voltage at 5.0A DC	V _F	1.3							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage TA = 25°C	I _R	10							uAmps
Maximum Full Load Reverse Current Average, Full Cycle at TC = 100°C		150							uAmps
Maximum Reverse Recovery Time (Note 1)	t _{rr}	150			250		500		nSec

NOTES : 1. Test Conditions: I_F = 0.5A, I_R = -1.0A, I_{RR} = -0.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts
3. Thermal Resistance Junction to Case.
4. Suffix "R" for Reverse Polarity.

RATINGS AND CHARACTERISTIC CURVES

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FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

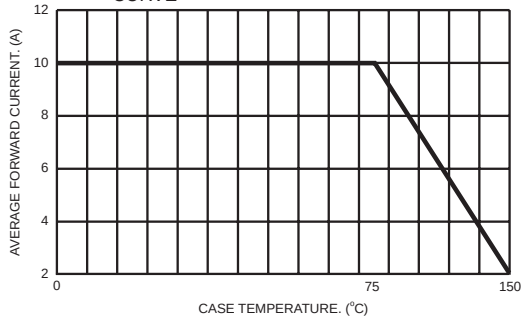


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER LEG

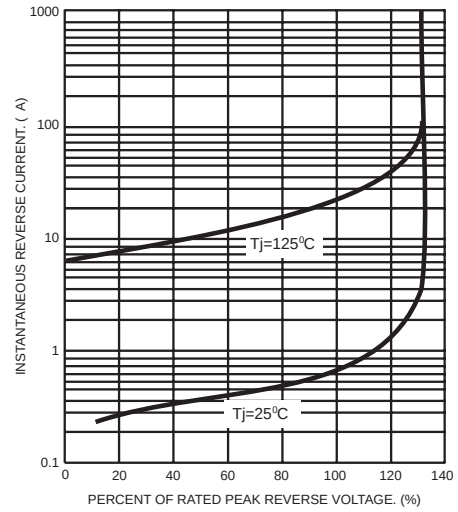


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

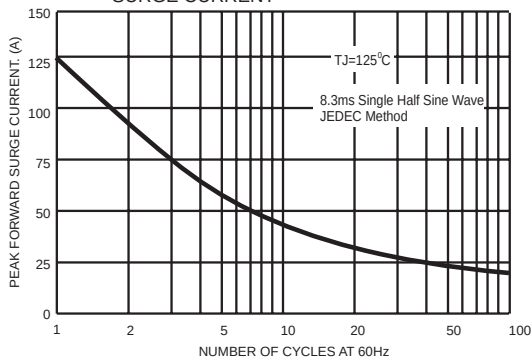


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

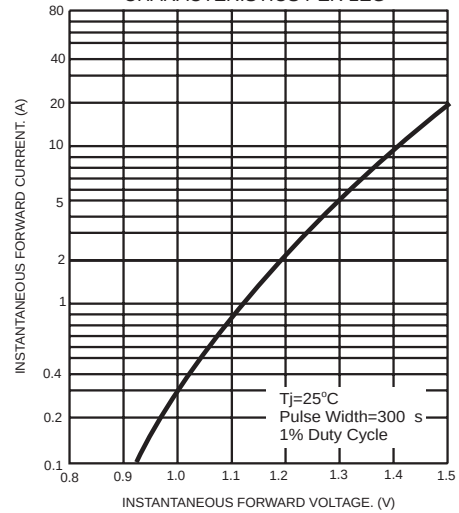


FIG.4- TYPICAL JUNCTION CAPACITANCE

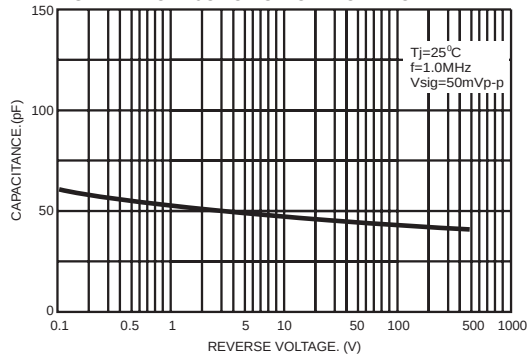
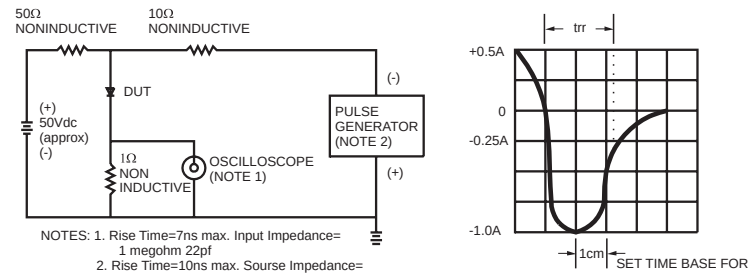


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





TO/ITO220 包装规范

Packing 包装	Dimension 尺寸	Qty 数量	Picture 图示
Bag/Tube 袋/管装	527mm*33mm*7mm	50 PCS	
Inner box 内盒	555mm*140mm*55mm	2000 PCS	 标签贴盒盖正面中心处
Carton 外箱	575mm*285mm *155mm	8000 PCS	 外箱两侧贴标签位置