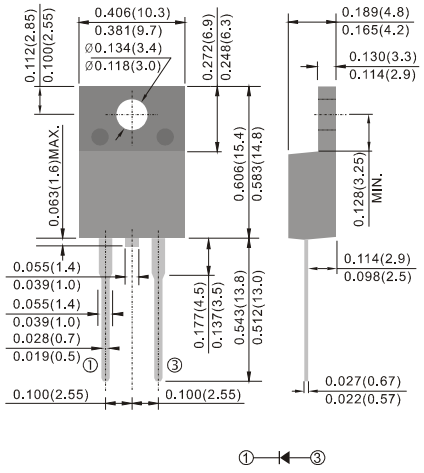
PANJIT SEMI CONDUCTOR

UF1000F~UF1008F

ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 800 Volt **CURRENT** 10 Ampere

ITO-220AC Unit : inch(mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Ultra fast recovery time, high voltage.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANCAL DATA

- Case: ITO-220AC full molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Weight: 0.055 ounces, 1.56 grams.
- Marking: Part number

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%

PARAMETER	SYMBOL	UF1000F	UF1001F	UF1002F	UF1003F	UF1004F	UF1006F	UF1008F	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	V
Maximum Average Forward Current at T_C = 100°C	$I_{F(AV)}$	10							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150							A
Maximum Forward Voltage at 10A	V_F	1			1.3		1.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C T_J=125°C	I_R	1 500							μA
Typical Junction Capacitance (Note 1)	C_J	80					50		pF
Maximum Reverse Recovery Time (Note 2)	t_{rr}	50					100		ns
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2							°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150							°C

NOTES:
1. Measured at 1 MHz and applied reverse voltage of 4 VDC.
2. Reverse recovery test conditions: I_F=0.5A, I_R=-1A, Irr=-0.25A.
3. Thermal resistance from junction to case.
4. Both bonding and chip structure are available.

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TYPICAL CHARACTERISTIC CURVES

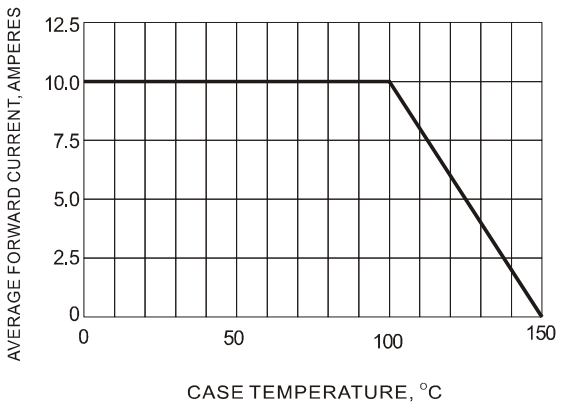

Fig.1 FORWARD CURRENT DERATING CURVE

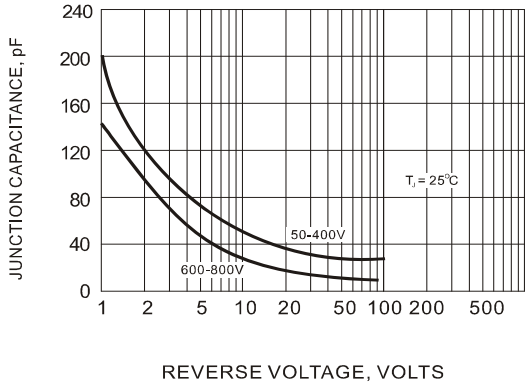

Fig.2 TYPICAL JUNCTION CAPACITANCES

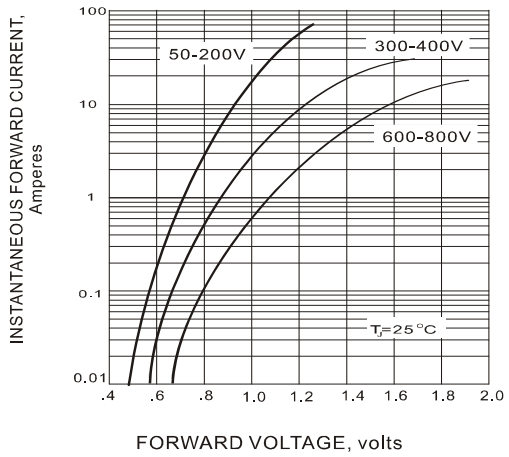

Fig.3 FORWARD CHARACTERISTICS

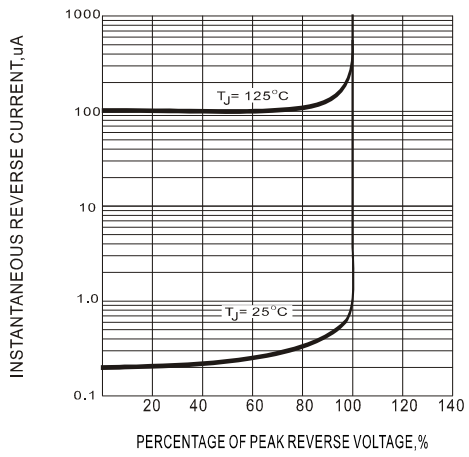

Fig.4 TYPICAL REVERSE CHARACTERISTICS

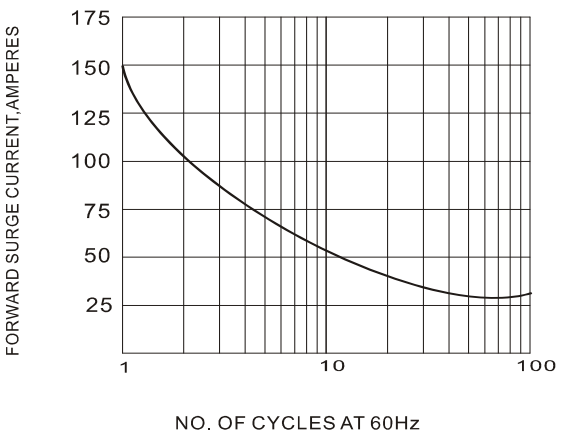

Fig.5 PEAK FORWARD SURGE CURRENT

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
UF1000F	ITO-220AC	50pcs / Tube	UF1000F
UF1001F	ITO-220AC	50pcs / Tube	UF1001F
UF1002F	ITO-220AC	50pcs / Tube	UF1002F
UF1003F	ITO-220AC	50pcs / Tube	UF1003F
UF1004F	ITO-220AC	50pcs / Tube	UF1004F
UF1006F	ITO-220AC	50pcs / Tube	UF1006F
UF1008F	ITO-220AC	50pcs / Tube	UF1008F

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