PANJIT SEMI CONDUCTOR

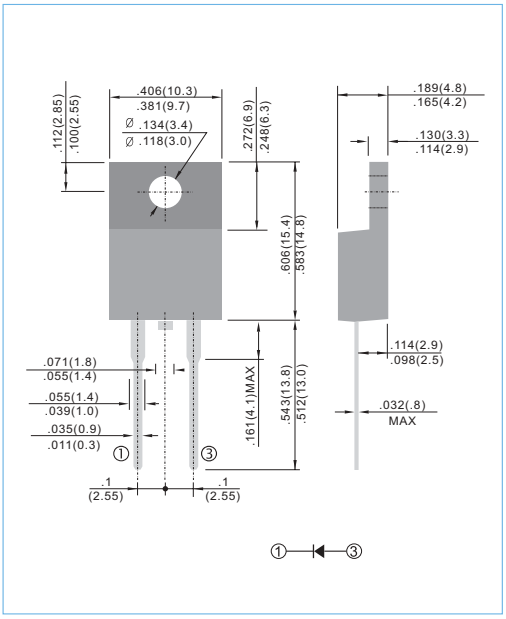
DATA SHEET

UF1000F~UF1008F

ISOLATION ULTRAFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 800 Volts **CURRENT** 10.0 Amperes

ITO-220AC Unit : inch (mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forwrd voltge, high current capability
- High surge capacity.
- Ultra fast recovery time, high voltage.
- Both normal and Pb free product are available :

  Normal : 80~95% Sn, 5~20% Pb

  Pb free: 98.5% Sn above

MECHANCALDATA

Case: ITO-220AC full molded plastic package

Terminals: Lead solderable per MIL-STD-202, Method 208

Polarity: As marked.

Standard packaging: Any

Weight: 0.08 ounces, 2.24grams.

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 Tc = 100°C	I_{AV}	10							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150							A
Maximum Forward Voltage at 10.0A	V_F	1.0			1.30		1.70		V
Maximum DC Reverse Current T_A=25°C at Rated DC Blocking Voltage T_A=125°C	I_R	10 500							uA
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)	RθJC	2							°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-50 to +150							°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, Irr=.25A.
3. Thermal resistance from Junction to case.
4. Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

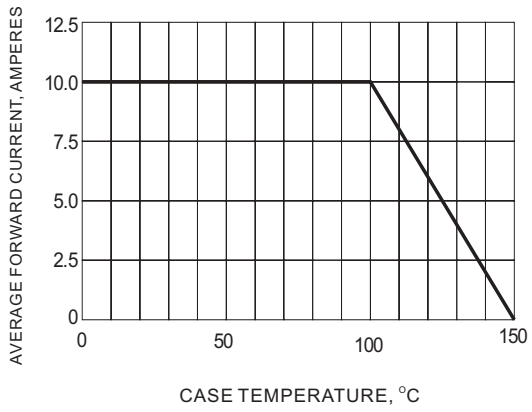


Fig.1 FORWARD CURRENT DERATING CURVE

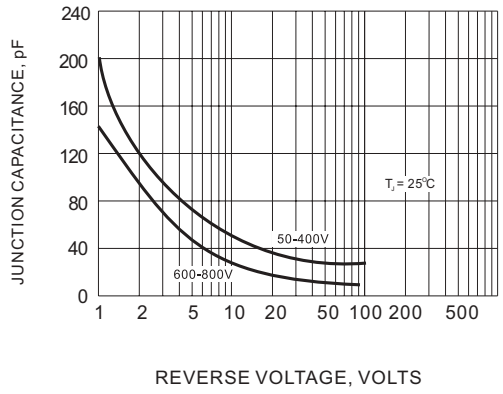


Fig.2 TYPICAL JUNCTION CAPACITANCES

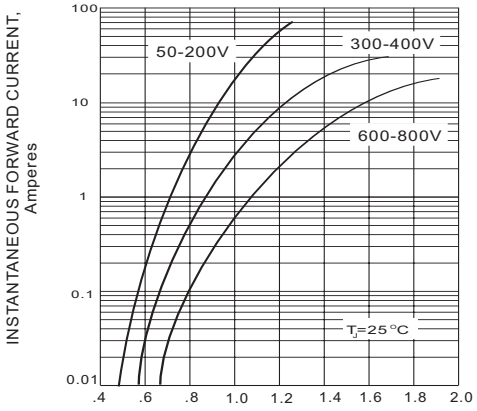


Fig.3 FORWARD CHARACTERISTICS

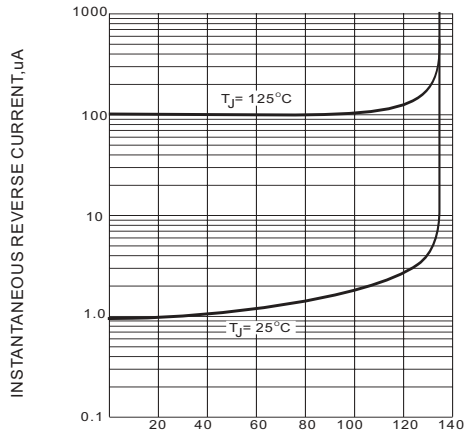


Fig.4 TYPICAL REVERSE CHARACTERISTICS

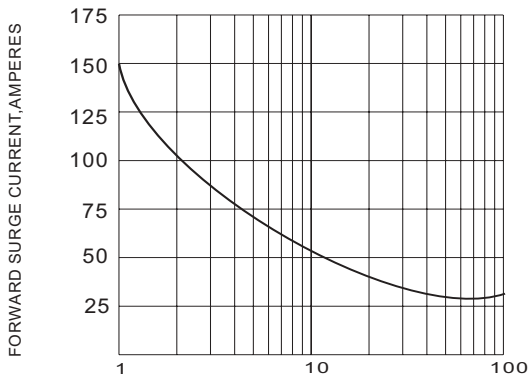


Fig.5 PEAK FORWARD SURGE CURRENT