



ULTRAFAST RECOVERY RECTIFIERS

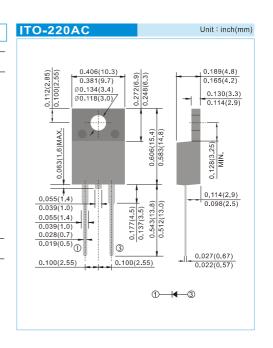
VOLTAGE 50 to 800 Volt CURRENT 10 Ampere

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	٧
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	٧
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	٧
Maximum Average Forward Current at T _c = 100°C	I _{F(AV)}	10					А		
Peak Forward Surge Current : 8.3ms single half sine- wave superimposed on rated load	I _{FSM}	150					А		
Maximum Forward Voltage at 10A	V _F	1 1.3 1.7			.7	٧			
Maximum DC Reverse Current at Rated DC $T_j=25^{\circ}$ C Blocking Voltage $T_j=125^{\circ}$ C	I _R	1 500					μА		
Typical Junction Capacitance (Note 1)	C _J	80 50			50	pF			
Maximum Reverse Recovery Time (Note 2)	t _{rr}	50 100			00	ns			
Typical Thermal Resistance (Note 3)	R _{eJC}	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, I_r =-0.25A.
- 3. Thermal resistance from junction to case.
- 4. Both bonding and chip structure are available.





TYPICAL CHARACTERISTIC CURVES

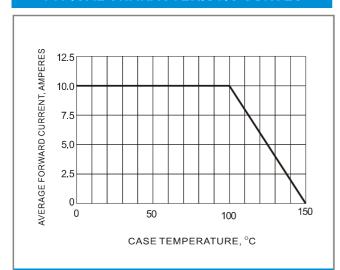


Fig.1 FORWARD CURRENT DERATING CURVE

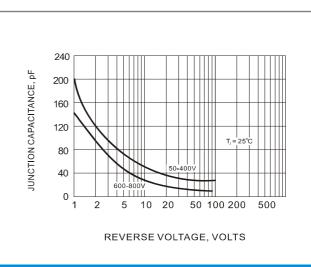


Fig.2 TYPICAL JUNCTION CAPACITANCES

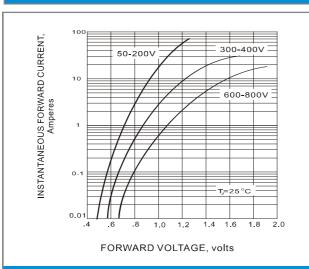


Fig.3 FORWARD CHARACTERISTICS

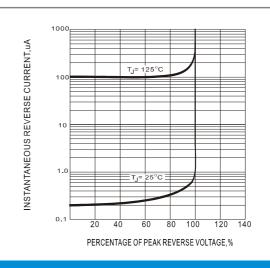
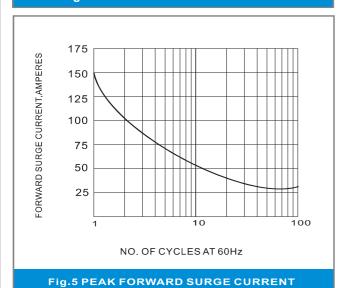


Fig.4 TYPICAL REVERSE CHARACTERISTICS







PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
UF1000F_T0_00001	ITO-220AC	50 pcs / Tube	UF1000F	Halogen free





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