

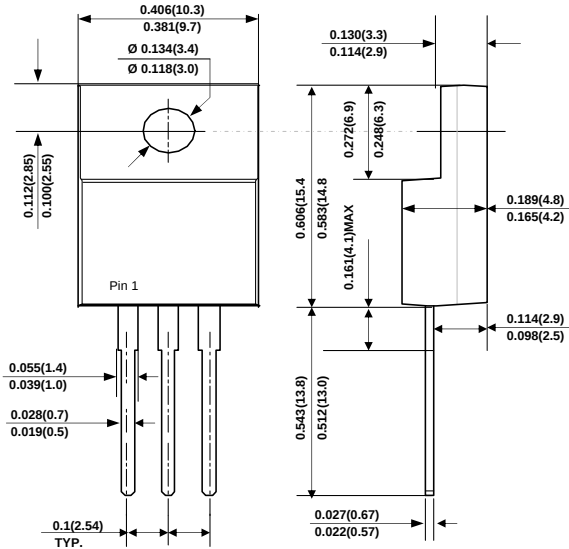


UF2000FCT THRU UF2008FCT

ISOLATION HIGH EFFICIENCY RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 20.0 Ampere

ITO-220AB



Dimensions in inches and (millimeters)

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0. Flame Retardant Epoxy Molding Compound.
- ◆ Exceeds environmental of MIL-S-19500/228
- ◆ Low power loss, high efficiency.
- ◆ Low forward voltage, high current capability.
- ◆ High surge capability.
- ◆ Ultra fast recovery times, high voltage.
- ◆ In compliance with EU RoHS 2002/95/EC directives.

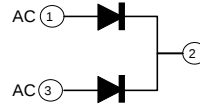
MECHANICAL DATA

Case: ITO-220AB, Molded plastic.

Terminals: Solderable per MIL-STD-750 , Method 2026

Weight: 1.561 gram (0.055 ounces).

Standard Packaging : Tube.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

PARAMETER	SYMBOLS	UF 2000FCT	UF 2001FCT	UF 2002FCT	UF 2003FCT	UF 2004FCT	UF 2006FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	Volts
Maximum DC Breakdown Voltage	V _{DC}	50	100	200	300	400	600	Volts
Maximum Average Forward Current at TC =100°C	I _{F(AV)}	20.0						Amp
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load(JEDEC methode)	I _{FSM}	250						Amps
Maximum Forward Voltage at IF=10.0A	V _F	1.00			1.30		1.50	Volts
Maximum DC Reverse Current Rated DC Blocking Voltage at T _J = 25°C T _J =100°C	I _R	10.0 100						μA
Maximum Reverse Recovery Time (NOTE 2)	t _{rr}	50					100	nS
Typical Junction Capacitance (NOTE 1)	C _J	200						pF
Typical Thermal Resistance (NOTE 3)	R _{θJC}	2.0						°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150						°C

- Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.
3. Thermal resistance from Junction to case.



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

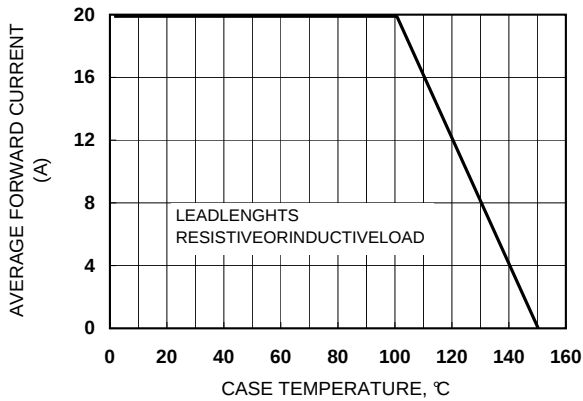


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

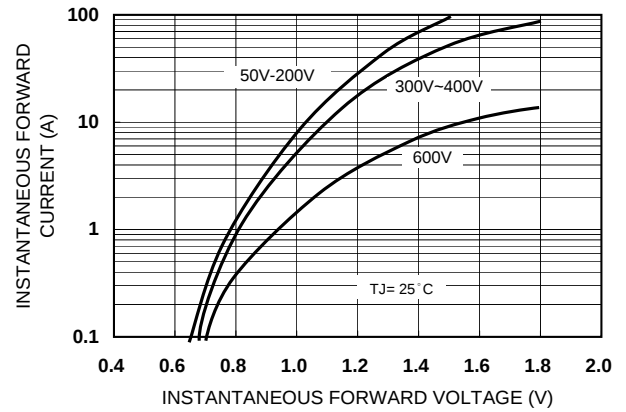


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

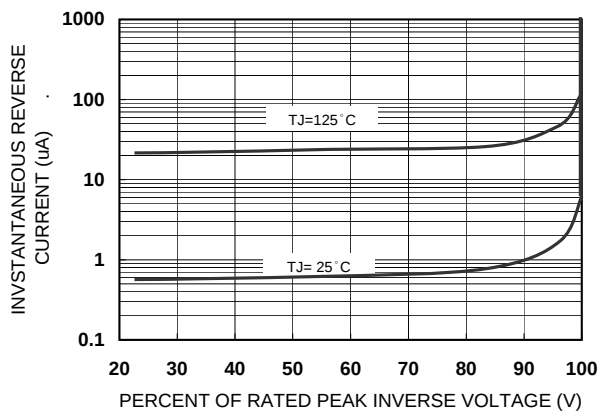


FIG. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

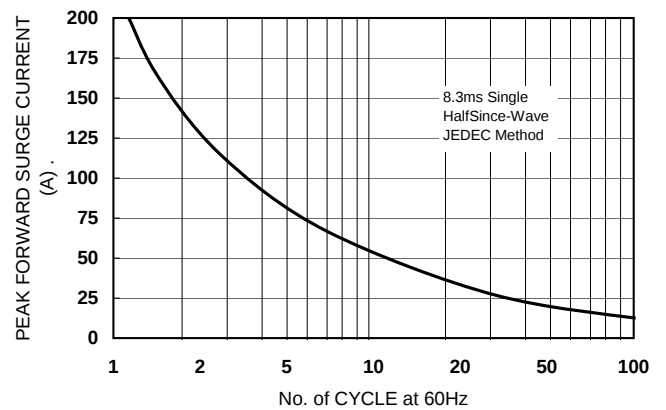


FIG. 5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

