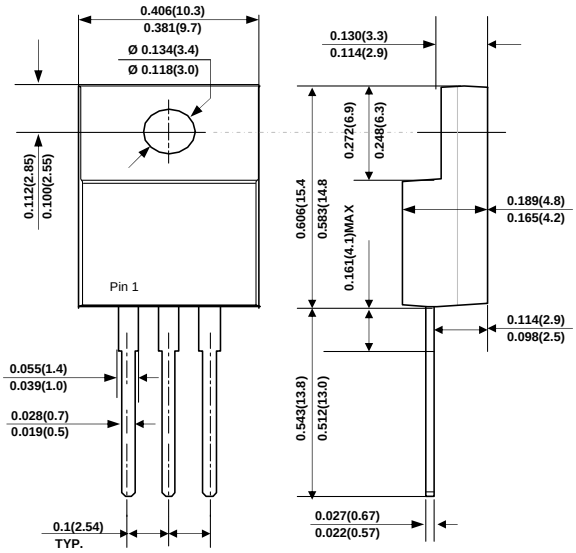
UF1600FCT THRU UF1608FCT

ISOLATION HIGH EFFICIENCY RECTIFIER

Reverse Voltage - 50 to 800 Volts Forward Current - 16.0 Ampere

ITO-220AB



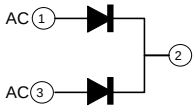
Dimensions in inches and (millimeters)

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: 1.5615 gram (0.055 ounces).
Standard Packaging : Tube.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwis e specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

PARAMETER	*SYMBOLS*	UF 1600FCT	UF 1601FCT	UF 1602FCT	UF 1604FCT	UF 1606FCT	UF 1608FCT	UNITS
Maximum Recurrenent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	Volts
Maximum DC Breakdown Voltage	V_{DC}	50	100	200	400	600	800	Volts
Maximum Average Forward Current at TC =100℃	$I_{F(AV)}$	16.0						Amp
Peak Forward Surge Current, 8.3ms single half sinewave superimposed on rated olad(JEDEC methode)	I_{FSM}	200						Amps
Maximum Forward Voltage at I_F=8.0A Per Diode	V_F	0.95			1.30	1.50		Volts
Maximum DC Reverse Current at T_J = 25℃ / Rated DC Blocking Voltage T_J=100℃	I_R	10.0 / 100						μA
Maximum Reverse Recovery Time (NOTE 2)	t_{rr}	50				100		nS
Typical Junction Capacitance (NOTE 1)	C_J	170				130		pF
Typical Thermal Resistance (NOTE 3)	$R_{\theta JC}$	2.0						℃/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150						℃

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Irr=0.25A.
3. Thermal resistance from Junction to case.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

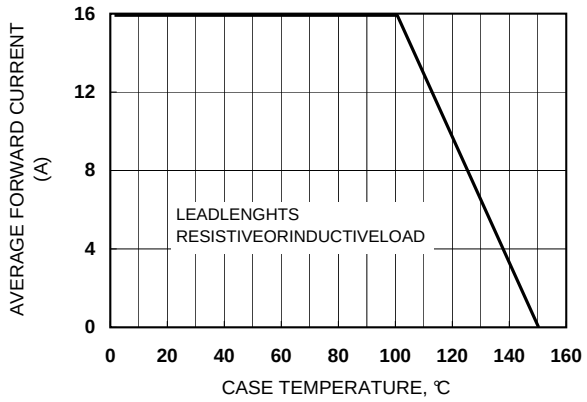

FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

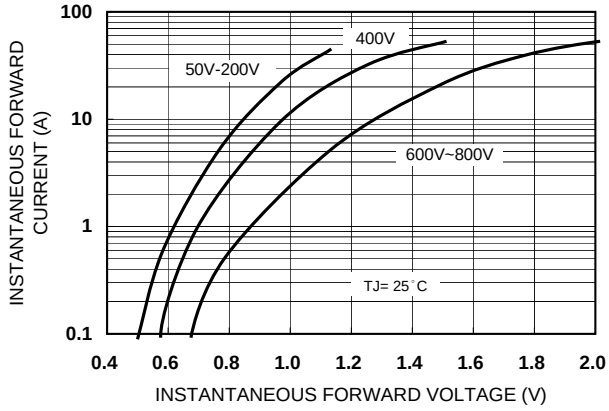

FIG. 3-TYPICAL REVERSE CHARACTERISTICS

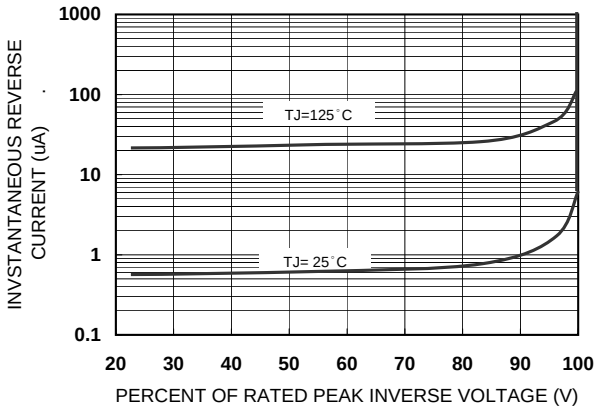

FIG. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

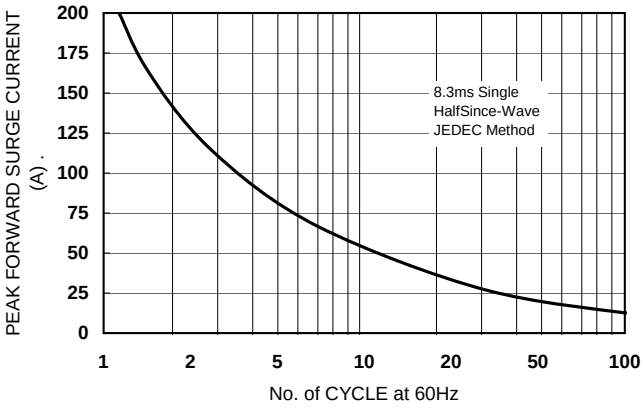

FIG. 5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM