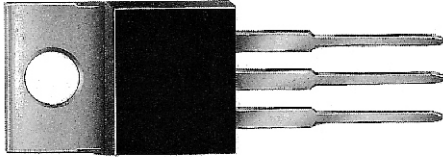


UF1600F thru UF1608F

ISOLATION ULTRAFAST SWITCHING RECTIFIERS



**CHENG-YI
ELECTRONIC**



FEATURES

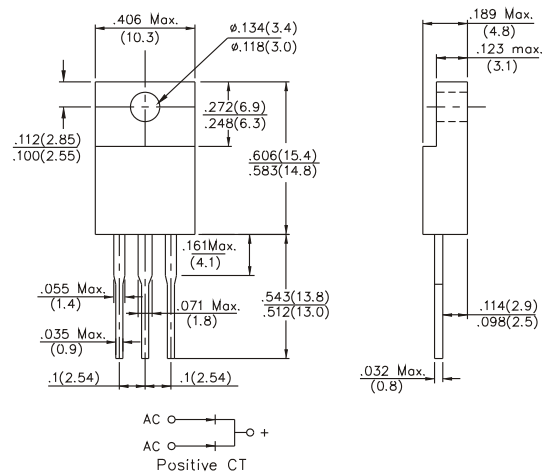
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228.
- Low power loss, high efficiency.
- Low forward voltage, high current capability.
- High surge capacity.
- Ultra fast recovery times, high voltage.

MECHANICAL DATA

- Case: ITO-220AB full molded plastic package
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: As marked.
- Mounting position: Any
- Weight: 0.08 ounces, 2.24 grams.

VOLTAGE RANGE
-50 TO 800 VOLTS
CURRENT
-16.0 Amperes

ITO-220AB



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%.

TYPY NUMBER	UF1600F	UF1601F	UF1602F	UF1603F	UF1604F	UF1606F	UF1608F	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	V
Maximum RMS Voltage	35	70	140	210	280	420	560	V
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length @ T _c =100°C	16							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	125							A
Maximum Instantaneous Forward Voltage at 8.0A	1.0		1.3		1.7			V
Maximum D.C Reverse Current @ T _A = 25°C at Rated D.C Blocking Voltage @ T _A =125°C				10				μA
				500				μA
Maximum Reverse Recovery Time (Note 1)	50				100			Ns
Typical Junction Capacitance (Note 2)	170				130			pF
Typical Junction Resistance (Note 3) R _θ JA	30							°C / W
Operating and Storage Temperature Range T _j , T _{STG}	-50 to +150							°C

Notes : 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

2. Measured at 1 MHz and applied reverse voltage of 4.0V D.C.

3. Thermal resistance from junction to ambient and from junction to lead length 0.375" (9.5mm) P.C.B. Mounted.

UF1600F thru UF1608F

ISOLATION ULTRAFAST SWITCHING RECTIFIERS



RATING AND CHARACTERISTICS CURVES UF1600F THRU UF1608F

Fig. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

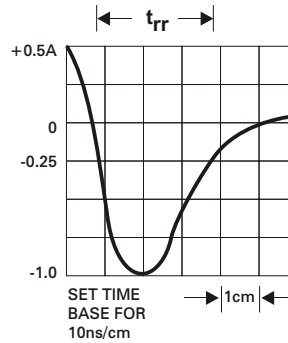
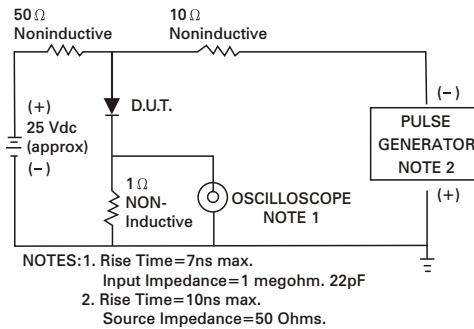


Fig. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

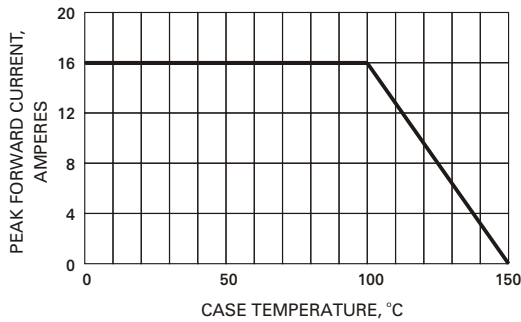


Fig. 2 - TYPICAL REVERSE CHARACTERISTICS

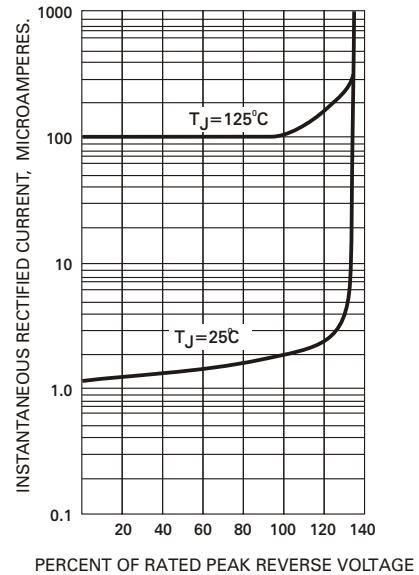


Fig. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

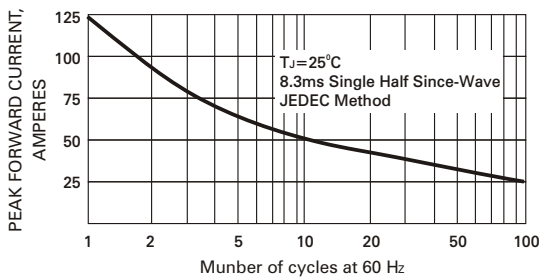


Fig. 5 - TYPICAL FORWARD CHARACTERISTICS

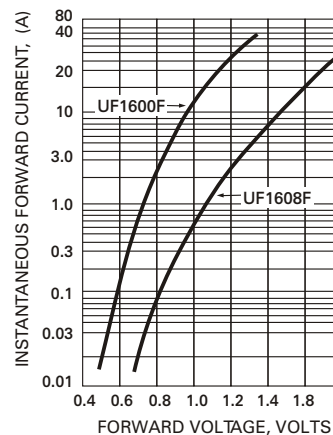


Fig. 4 - TYPICAL JUNCTION CAPACITANCE

