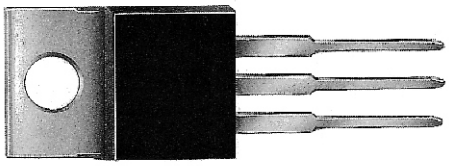
UF1600 thru UF1608

ULTRAFAST SWITCHING RECTIFIERS

CHENG-YI ELECTRONIC



VOLTAGE RANGE
-50 TO 800 VOLTS
CURRENT
-16.0 Amperes

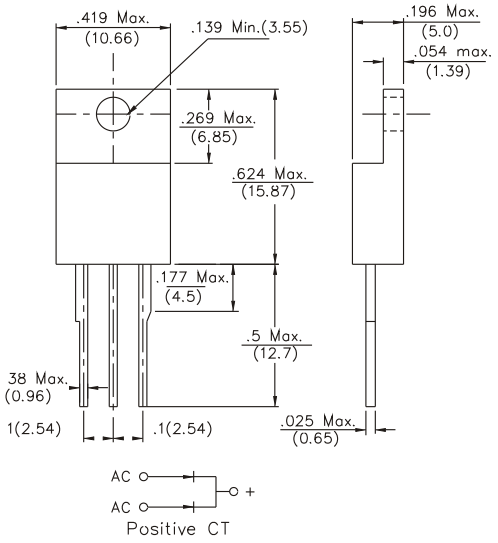
FEATURES

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

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, reistive or inductive load.
For capacitive load, derate current by 20%.

TYPY NUMBER	UF1600	UF1601	UF1602	UF1603	UF1604	UF1606	UF1608	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	10							μA
at Rated D.C Blocking Voltage @ T_A=125°C	500							μA
Maximum Reverse Recovery Time (Note 1)	50					100		Ns
Typical Junction Capacitance (Note 2)	170					130		pF
Typical Junction Resistance (Note 3) $R\theta JA$	30							°C / W
Operating and Storage Temperature Range T_j, T_{STG}	-65 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.

UF1600 thru UF1608

ULTRAFAST SWITCHING RECTIFIERS

CHENG-YI ELECTRONIC

RATING AND CHARACTERISTICS CURVES
UF1600 THRU UF1608

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

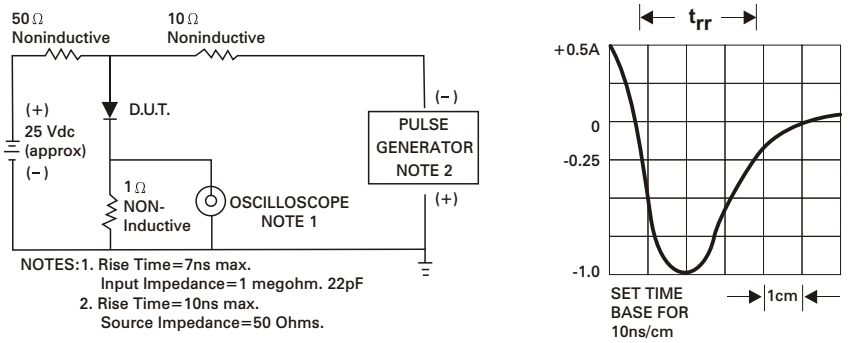


Fig. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

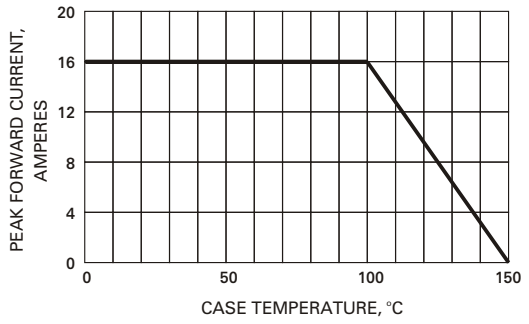


Fig. 2 - TYPICAL REVERSE CHARACTERISTICS

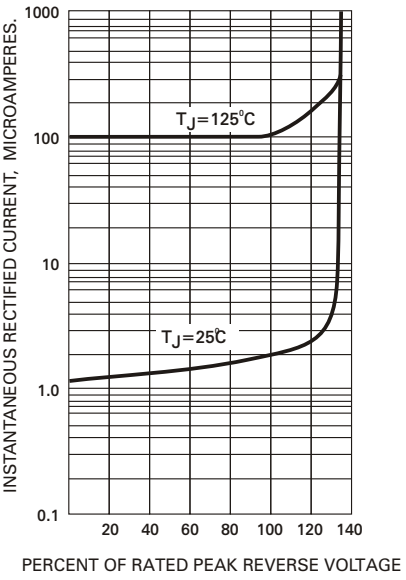


Fig. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

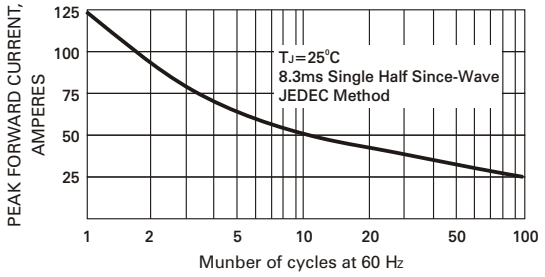


Fig. 4 - TYPICL JUNCTION CAPACITANCE

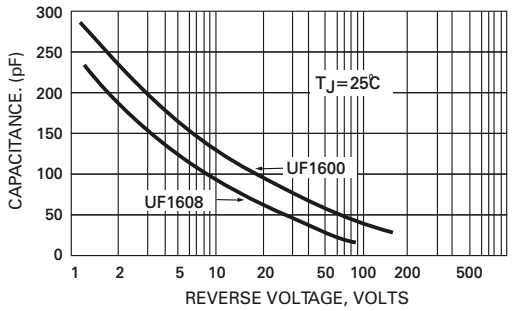


Fig. 5 - TYPICAL FORWARD CHARACTERISTICS

