

UF10005CT THUR UF1008CT

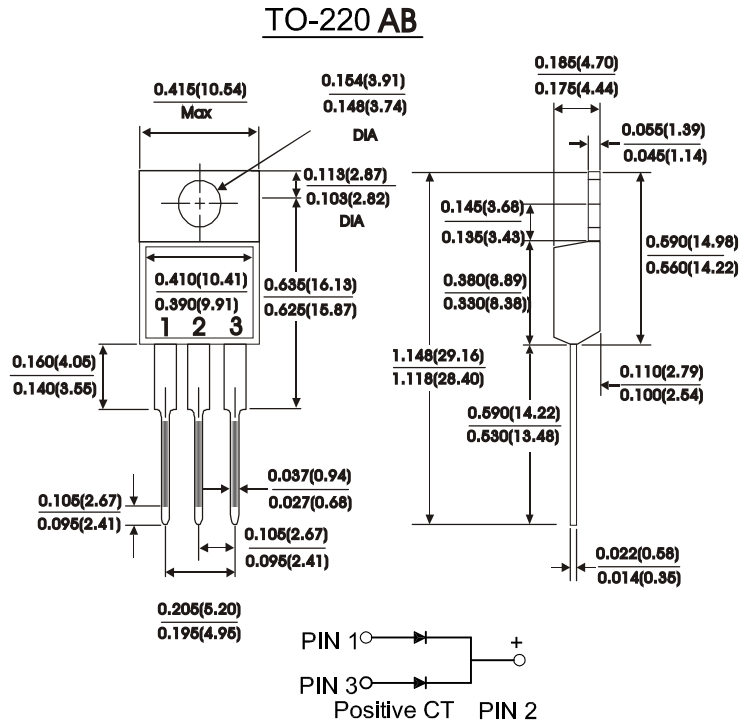
ULTRA FAST GLASS PASSIVATED RECTIFIERS

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Ideally suited for freewheeling diode power factor correction applications
- Excellent high temperature switching
- Optimized to reduce switching losses
- High temperature soldering guaranteed : 250°C /10 second, 0.25"(6.35mm) from case

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic
 Terminals : Leads solderable per MIL-STD-750 Method 2026
 Position : As marked
 Mounting Position : Any
 Mounting Torque : 5 in - lbs.max
 Weight : 0.08 ounce, 2.24grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

Characteristic	Symbol	UF 10005CT	UF 1001CT	UF 1002CT	UF 1003CT	UF 1004CT	UF 1006CT	UF 1008CT	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	280	560	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	Volts
Maximum average forward rectified current at $T_c=100^\circ\text{C}$	I_O	10.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Per leg)	I_{FSM}	100							Amps
Maximum instantaneous forward voltage (Per leg) $I_F=5.0A$	V_F	1.0		1.30		1.70		Volts	
Maximum DC reverse current (Per leg) at rated DC blocking voltage $T_c=25^\circ\text{C}$ $T_c=125^\circ\text{C}$	I_R	10.0 500.0							μA
Typical reverse recovery time (NOTE 1)(Per leg)	T_{RR}	50					100		nS
Typical junction capacitance (NOTE 2)(Per leg)	C_J	50							P_F
Operating and storage temperature range	T_J	-55to +150							$^\circ\text{C}$
Storage temperature range	T_{Stg}	-55to +150							$^\circ\text{C}$

NOTES:

- (1) Reverse Recovery Test CONDITION : $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$
 (2) Measured at 1 MHz and reverse Voltage of 4.0V
 (3) Marking : UF10005CT = UF10005 (Without Marking "CT")
 Symbol Marking

RATINGS AND CHARACTERISTIC CURVES UF1005CT THRU UF1008CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

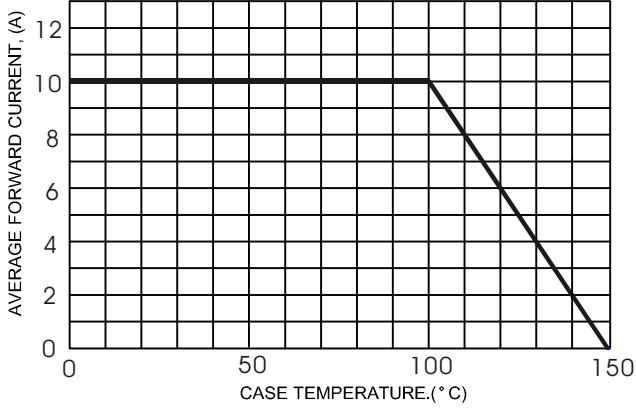


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

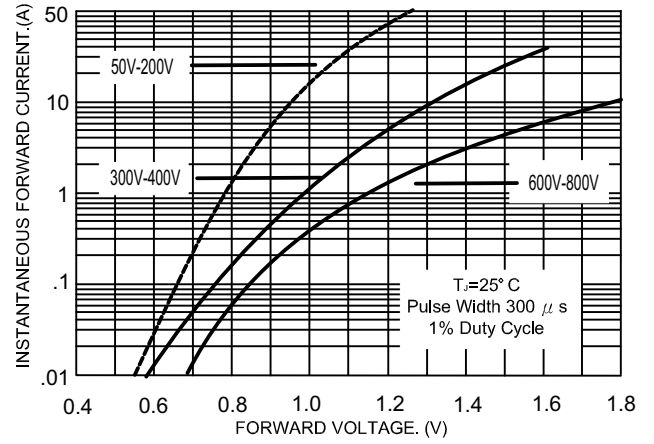


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

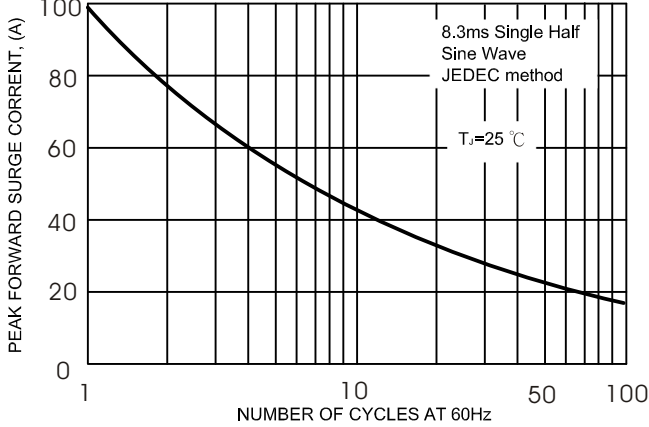


Figure 6 GR1 Test Circuit

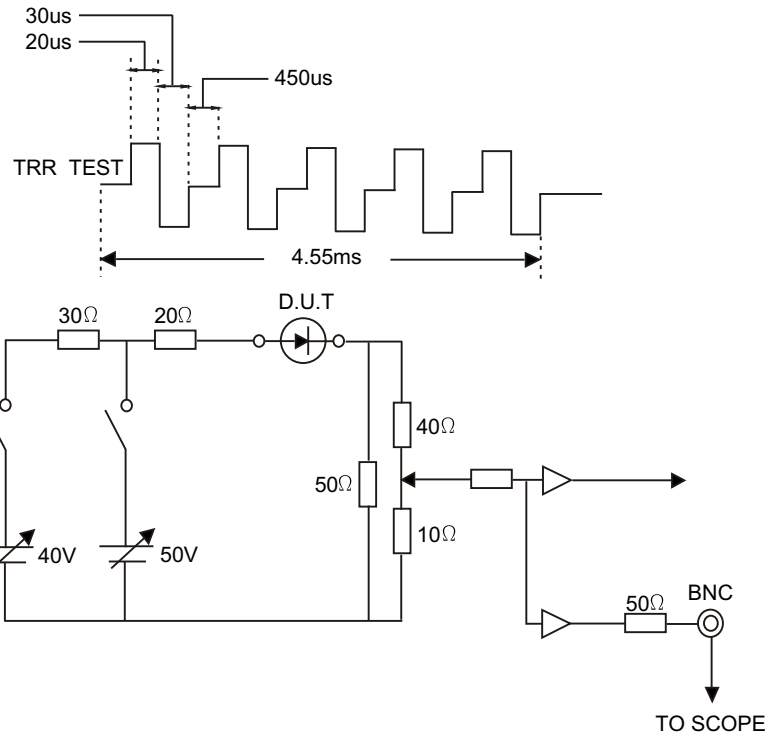


FIG.4- TYPICAL JUNCTION CAPACITANCE

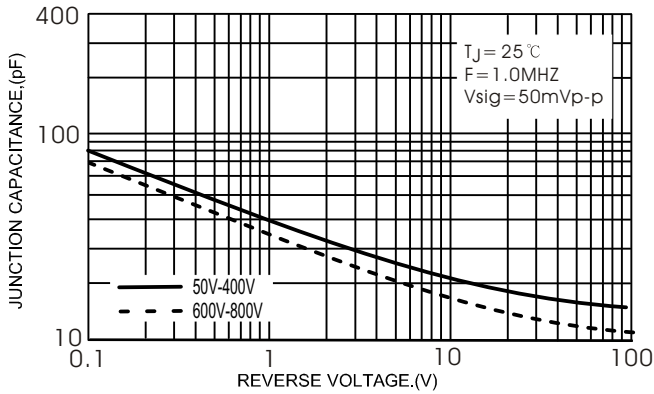


FIG.5- TYPICAL REVERSE CHARACTERISTICS

