

ULTRA FAST GLASS PASSIVATED RECTIFIERS

TO-220 AC

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

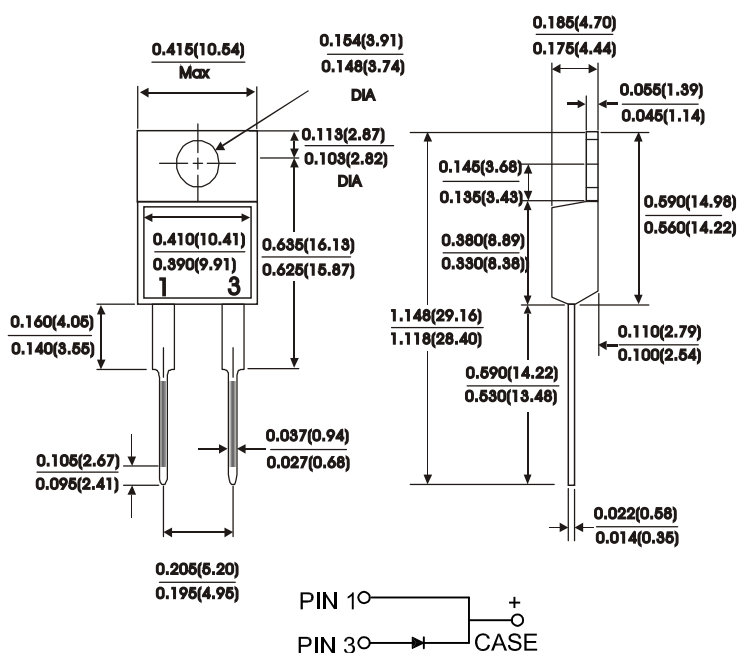
Case : JEDEC TO-220AC molded plastic
 Terminals : Leads solderable per MIL-STD-750 Method 2026

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 10005	UF 1001	UF 1002	UF 1003	UF 1004	UF 1006	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	280	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	Volts
Maximum average forward rectified current See Fig.1	$I_{(AV)}$	10.0						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	I_{FSM}	125						Amps
Maximum instantaneous forward voltage (Per leg) $I_F=10A$	V_F	1.1		1.30		1.50		Volts
Maximum DC reverse current at rated DC blocking voltage (Per leg) $T_C=25^\circ C$ $T_C=100^\circ C$	I_R	10.0 100.0						μA
Typical reverse recovery time (Per leg)(NOTE 1)	T_{RR}	35				50		nS
Typical junction capacitance (Per leg)(NOTE 2)	C_J	90				65		P_F
Operating temperature range	T_J	-55to+150						$^\circ C$
Storage temperature range	T_{Stg}	-55to+150						$^\circ C$

NOTES:

(1) Reverse Recovery Test CONDITION : $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$

(2) Measured at 1MHZ and reverse Voltage of 4.0V

RATINGS AND CHARACTERISTIC CURVES UF1005 THRU UF1006

