



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F, EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 2790-0314 FAX: 2790-0206



UF4001

THUR

UF4007

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

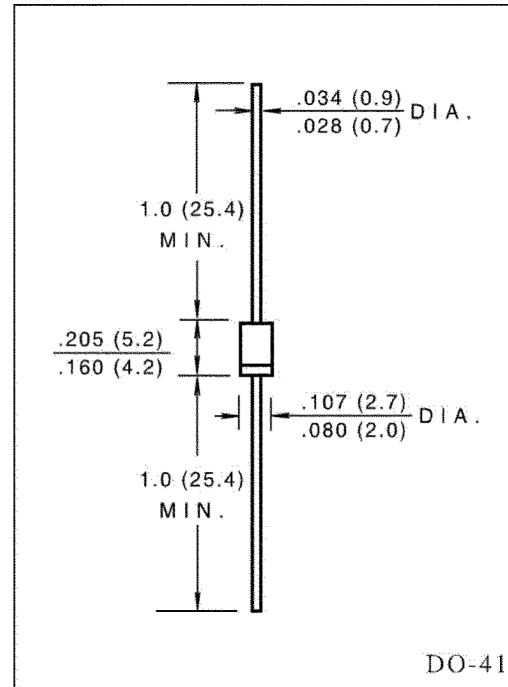
1.0 Ampere

FEATURES

- Low cost construction
- Fast switching for high efficiency
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375" (9.5mm)lead length
at 5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case: transfer molded plastic
- Epoxy: UL94V - 0 rate flame retardant.
- Polarity: Color band denotes cathode end.
- Lead: Plated axial lead, solderable per MIL - STD - 202E
method 208C
- Mounting position: Any
- Weight: 0.012 ounce, 0.33gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	UF 4001	UF 4002	UF 4003	UF 4004	UF 4005	UF 4006	UF 4007	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	850	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current, 0.375" (9.5mm) Lead length at $T_A = 55^\circ C$	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	1.0			1.7				Volts
Maximum DC Reverse Current at rate DC blocking voltage	I_R	$T_A = 25^\circ C$ 10							μA
		$T_A = 125^\circ C$ 50							
Maximum Reverse Recovery Time $T_j = 25^\circ C$ (Note 1)	t_{rr}	50				75			nS
Typical Junction Capacitance (Note 2)	C_j	15							pF
Typical Thermal Resistance(Note 3)	$R_{\theta JA}$	60							$^\circ C/W$
Operating and Storage Temperature Range	T_j, T_{STG}	(-65 TO +150)							$^\circ C$

NOTES:

1. Test condition: $I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$
2. Measured at 1 MHz and applied reverse of 4.0 volts.
3. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, P.C.B. mounted.



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RATINGS AND CHARACTERISTIC CURVES UF4001 THRU UF4007

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

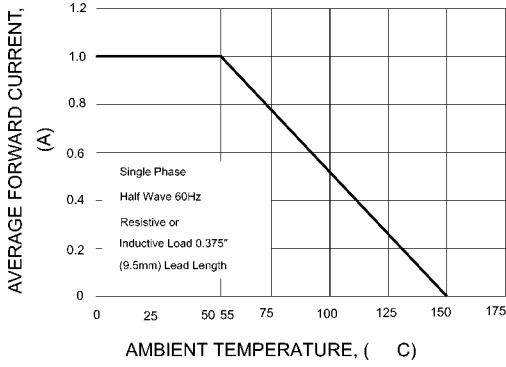


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

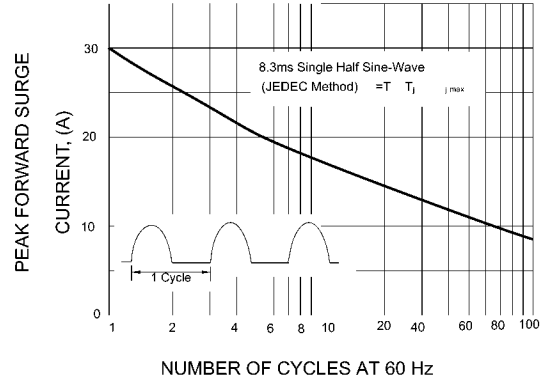


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

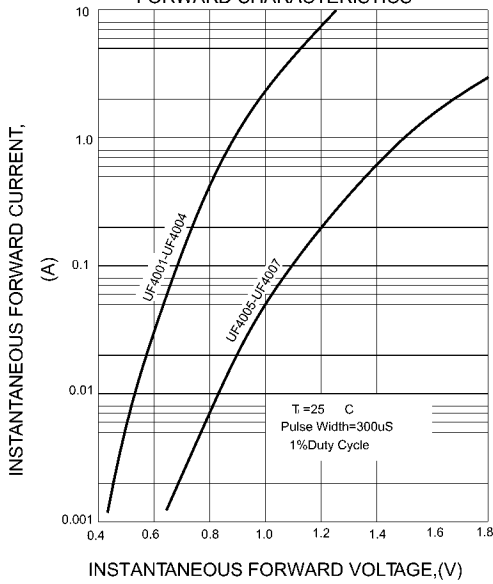


FIG.4-TYPICAL REVERSE CHARACTERISTICS

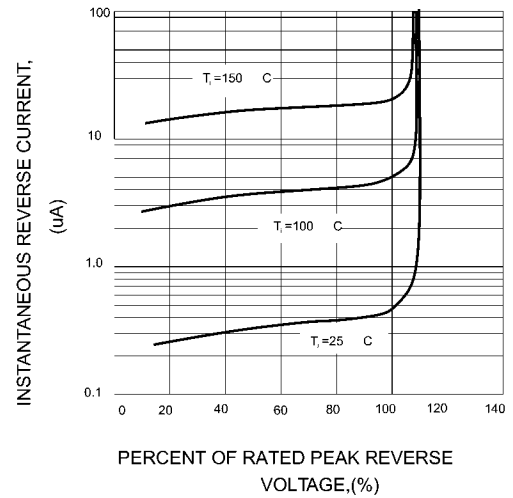


FIG.5-TYPICAL JUNCTION CAPACITANCE

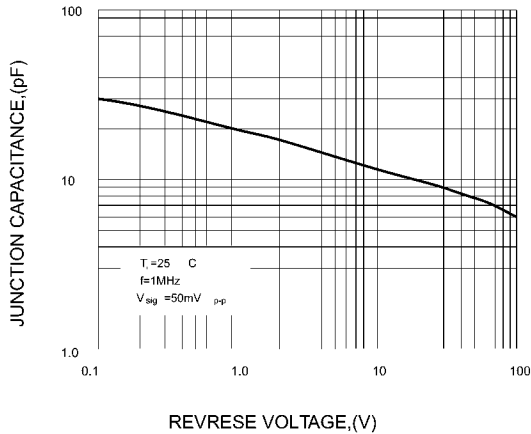


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

