

CURRENT 1.0 Ampere
 VOLTAGE RANG 50 to 1000 Volts

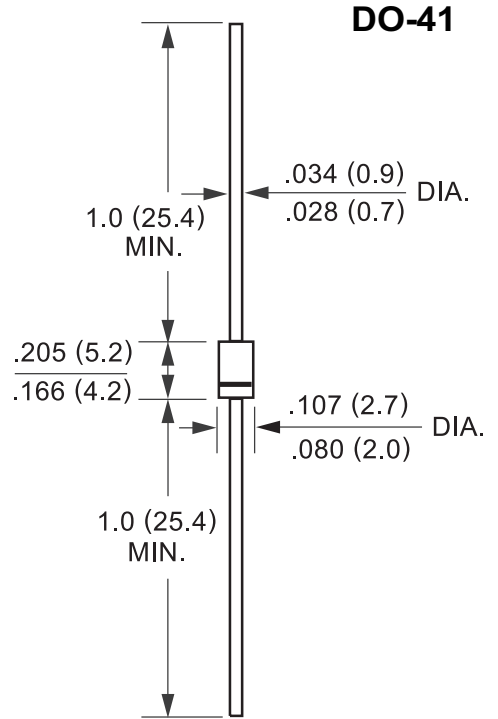
UF4001 THRU UF4007

FEATURES

- Low coat construction
- Fast switching for high efficiency.
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
 260 /10 secods/.375 (9.5mm)lead length at 5 lbs(2.3kg) tension

MECHANICAL DATA

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



Dimensions in inches and (millimeters)

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	UNITS
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	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 @ 1.0A	V _F	1.0				1.7			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A = 25	10							μA
	T _A = 125	50							
Maximum Reverse Recovery Time T _J = 25 (NOTE 1)	t _{rr}	50				75			ns
Typical Thermal Resistance (NOTE 2)	C _J	15							PF
Typical Thermal Resistance(NOTE 3)	R _{θJA}	60							/W
Operating Junction Temperature Range	T _J , T _{STG}	(-55 to +150)							

Notes:

1. Test Conditions: I_f=0.5mA, I_r=1.0mA, I_{rr}=0.25A
2. Measured at 1 MHz and applied reverse of 4.0 volts.
3. Thermal resistance from junction to ambient with .375 (9.5mm)lead length, P.C.B. mounted.

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RATING AND CHARACTERISTIC CURVES UF4001 Thru UF4007

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

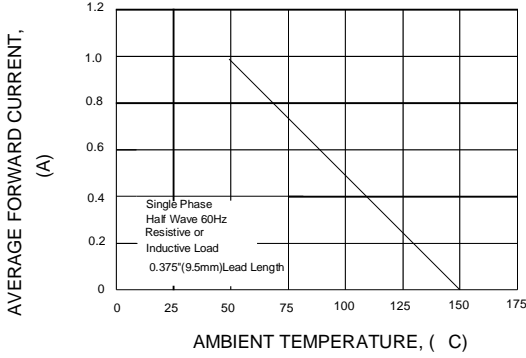


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

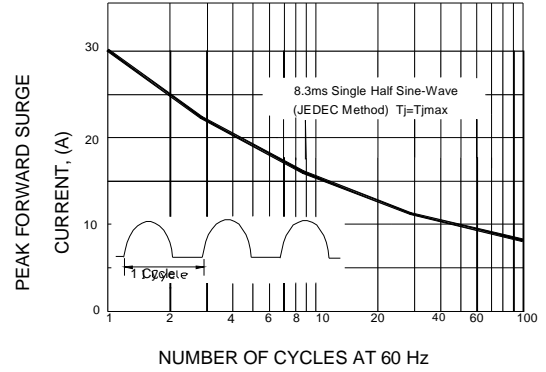


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

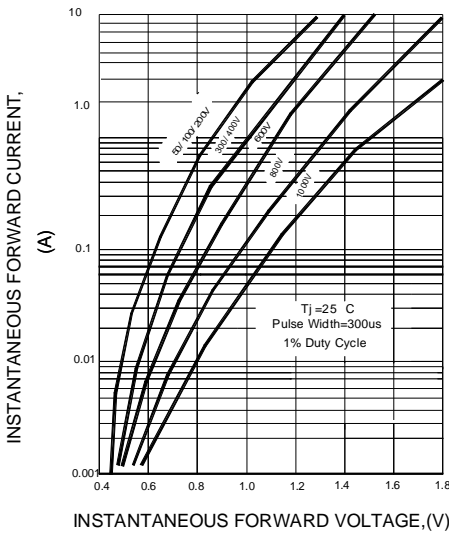


FIG.5-TYPICAL JUNCTION CAPACITANCE

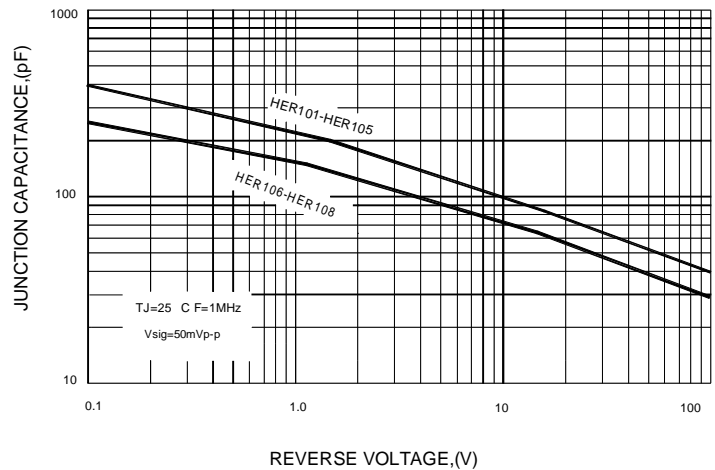


FIG.4-TYPICAL REVERSE CHARACTERISTICS

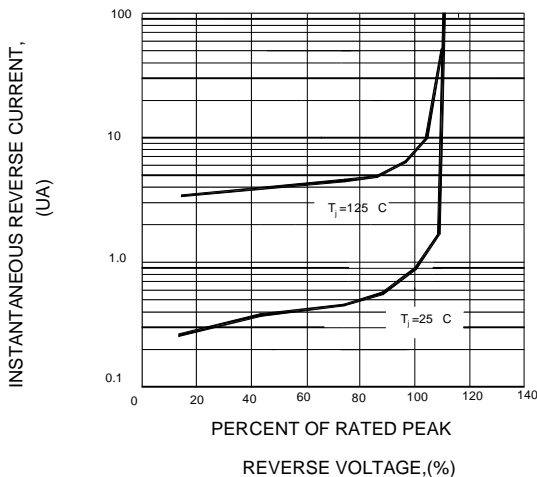
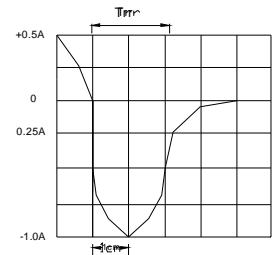
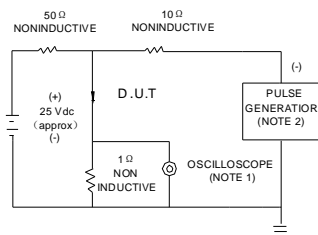


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTE: 1. Rise Time =7ns max. Input Impedance=1megohm.22pF
 2. Rise time=10ns max. Source Impedance=50 ohms

SET TIME BASE FOR 50 /100NS /cm