



UF4001 THRU UF4007

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

ULTRA FAST RECTIFIERS

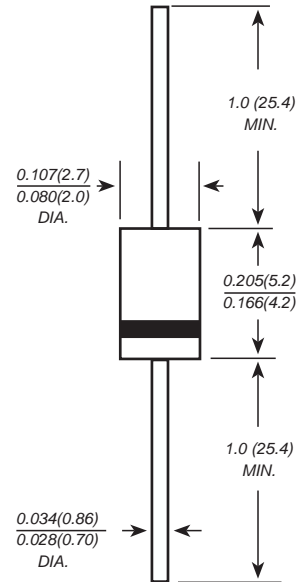
Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Ultra fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

Case : JEDEC DO-41 Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.012 ounce, 0.33 grams

DO-41



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 current derate by 20%.

parameter	SYMBOLS	UF 4001	UF 4002	UF 4003	UF 4005	UF 4006	UF 4007	UNITS
		MDD UF 4001	MDD UF 4002	MDD UF 4003	MDD UF 4005	MDD UF 4006	MDD UF 4007	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =55°C	I <sub(av)< sub=""></sub(av)<>	1.0						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0						A
Maximum instantaneous forward voltage at 1.0A	V _F	1.0			1.7			V
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =100°C	I _R	5.0 150.0						µA
Maximum reverse recovery time (NOTE 1)	t _{rr}	50			75			ns
Typical junction capacitance (NOTE 2)	C _J	15.0						pF
Typical thermal resistance (NOTE 3)	R _{θJA}	50.0						°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150						°C

- Note:** 1. Reverse recovery condition I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 3. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted



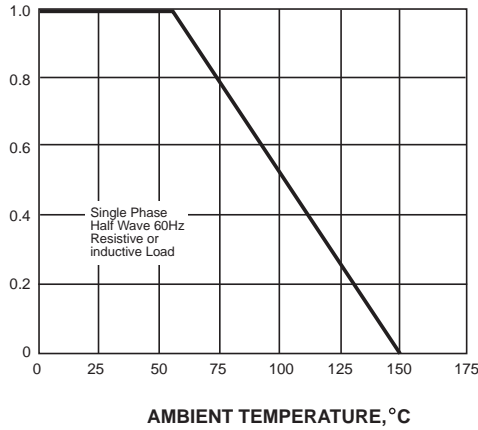
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Ratings And Characteristic Curves

AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



PEAK FORWARD SURGE CURRENT, AMPERES

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

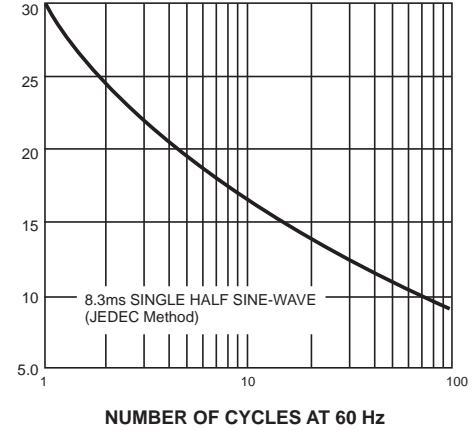


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

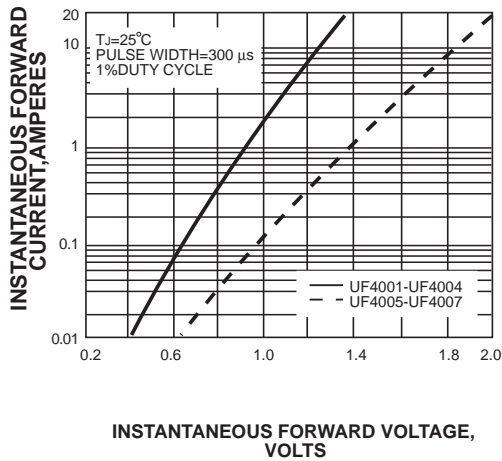


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

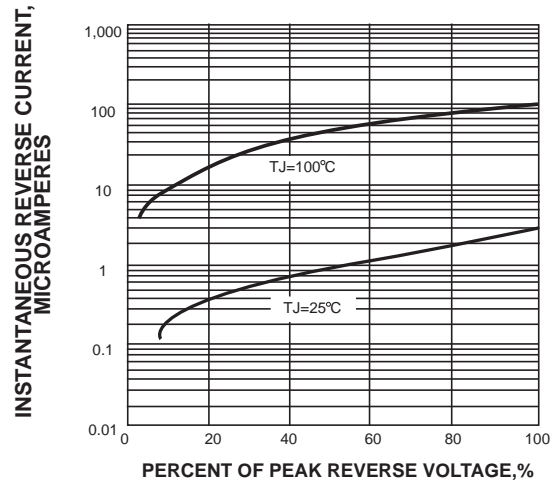
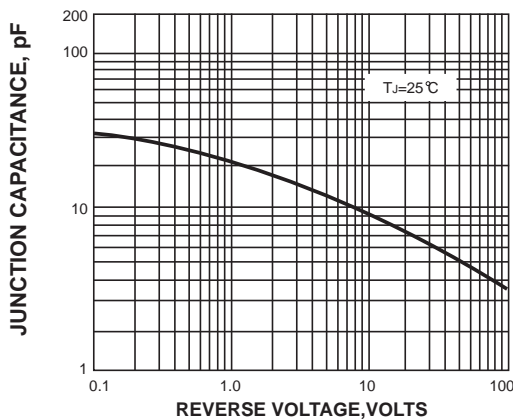
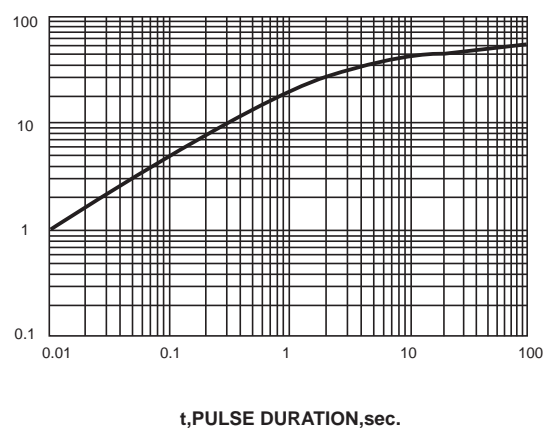


FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The curve above is for reference only.

单击下面可查看定价，库存，交付和生命周期等信息

[>>MDD\(辰达行\)](#)