



YENYO

# UF4001G THRU UF4007G

Glass Passivated Ultra Fast Recovery Rectifier

## Features

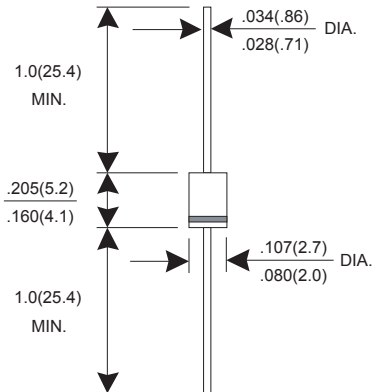
- \* Fast switching for high efficiency
- \* Low forward voltage drop
- \* High current capability
- \* Low reverse leakage current
- \* High surge current capability

## Mechanical Data

- \* Case: Molded plastic DO-41
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solderable per MIL-STD-202 method 208
- \* Polarity: Color band denotes cathode
- \* Mounting position: Any
- \* Weight: 0.34 gram

**Voltage Range 50 to 1000 V  
Current 1.0 Ampere**

### DO-41



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

PARAMTER	SYMBOL	UF 4001G	UF 4002G	UF 4003G	UF 4004G	UF 4005G	UF 4006G	UF 4007G	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current $T_L=55^\circ\text{C}$	IF(AV)	1.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							A
Maximum Instantaneous Forward Voltage @ 1.0 A	VF	1.0		1.3		1.7		V	
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	IR	5.0				100			uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			nS
Typical junction Capacitance (Note 2)	CJ	17							pF
Typical Thermal Resistance (Note 3)	RθJA	60							°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150							°C

NOTES : (1) Reverse recovery test conditions  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$ .  
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.  
 (3) Thermal Resistance junction to lead.

# RATINGS AND CHARACTERISTIC CURVES UF4001G THRU UF4007G

FIG.1 - FORWARD CURRENT DERATING CURVE

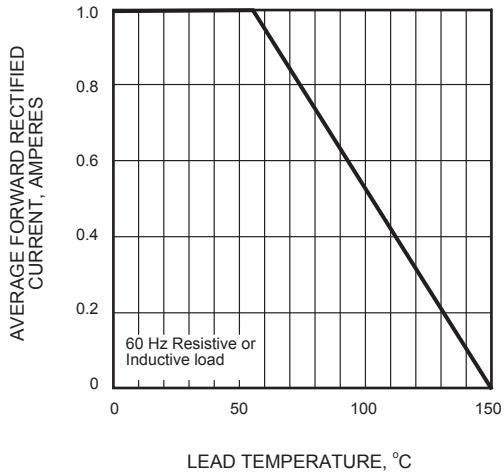


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

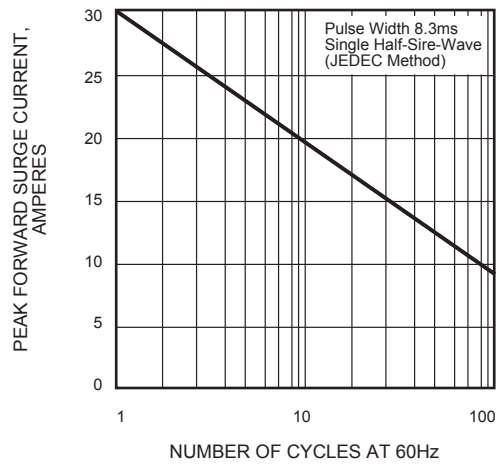


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

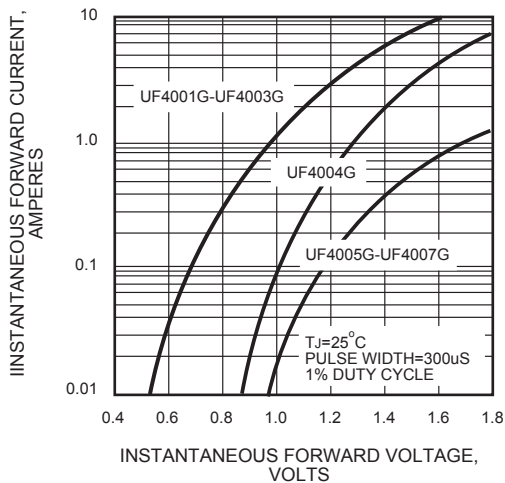


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

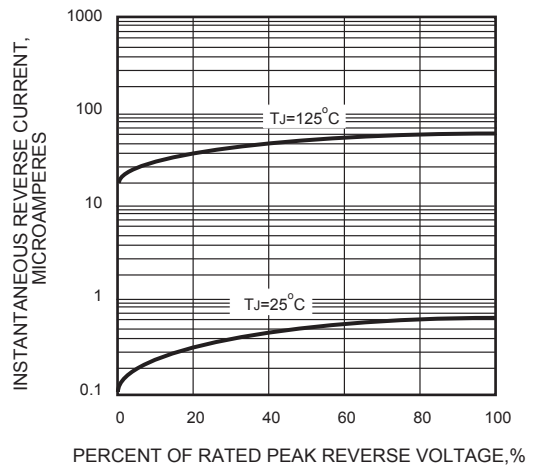


FIG.5 - TYPICAL JUNCTION CAPACITANCE

