

# **UF4001GU THRU UF4007GU**

1.0 AMP. Glass Ultra Fast Rectifiers

### **Features**

- · Low loss.
- · High current capability
- · High reliability
- · High surge current capability
- Plastic material-UL flammability 94V-0

### **Mechanical Data**

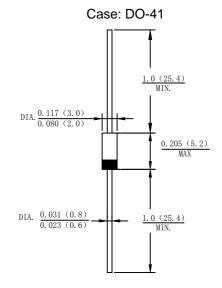
· Case: Molded plastic DO-41

 Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed

· Polarity: Color band dentes cathode end

Mounting Position: AnyMaking: Type Number

· Lead Free: For RoHS/Lead Free Version



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%

Type Number	SYMBOL	UF 4001GU	UF 4002GU	UF 4003GU	UF 4004GU	UF 4005GU	UF 4006GU	UF 4007GU	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	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
Average Rectified Output Current @TL =100°C	I <sub>F(AV)</sub>	1.0							Α
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	İfsm	35							А
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l²t	5.08						A <sup>2</sup> s	
Forward Voltage @IF=1.0A	V <sub>FM</sub>	1.0 1.3 1.7					V		
Peak Reverse Current @T <sub>J</sub> =25°C  At Rated DC Blocking Voltage @T <sub>J</sub> =125°C	lR	5.0 100							uA
Maximum Reverse Recovery Time (Note1)	T <sub>RR</sub>	50 75						nS	
Typical Junction Capacitance (Note 2)	CJ	9							pF
Typical Thermal Resistance Junction to Ambient	RөJA	75							°C/W
Operating Temperature Range	TJ	-55 to+ 150							$^{\circ}$
Storage Temperature Range	Тѕтс	-55 to+ 150							$^{\circ}$ C

Note: 1. Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Irr=0.25A.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

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Fig. 1 Forward Current Derating Curve

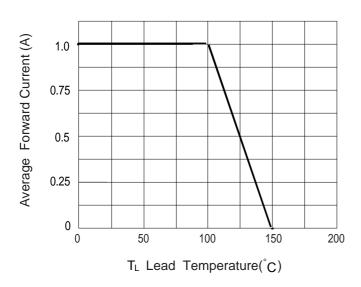


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

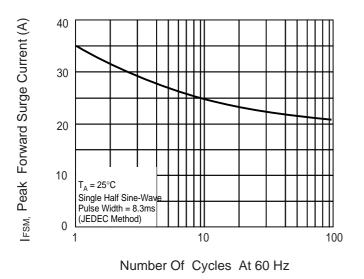
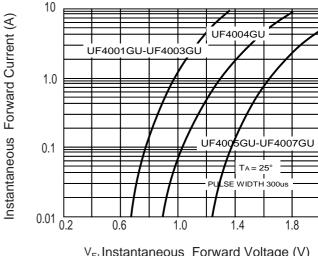
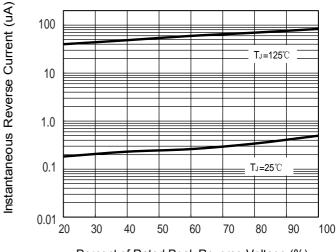


Fig. 2 Typ. Forward Characteristics



V<sub>F</sub>, Instantaneous Forward Voltage (V)

Fig. 4 Typical Reverse Characteristics (per element)



Percent of Rated Peak Reverse Voltage (%)

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