



## Ultra Fast Glass Passivated Rectifier

### Features

- Fast switching for high efficiency
- Glass passivated chip junction
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
260°C/10 seconds, 0.375" (9.5mm) lead length
- RoHS and REACH Compliance



### Mechanical Data

<b>Case:</b>	Transfer molded plastic
<b>Polarity:</b>	Color band denotes cathode end.
<b>Epoxy:</b>	UL94V-0 rate flame retardant
<b>Lead:</b>	Plated axial lead, solderable per MIL-STD-202E Method 208C
<b>Mounting Position:</b>	Any
<b>Weight:</b>	0.012 ounce, 0.33 gram

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	UF1001G	UF1002G	UF1003G	UF1004G	UF1005G	UF1006G	UF1007G	Unit	Conditions
<b>VRRM</b>	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>VRMS</b>	Max RMS Voltage	35	70	140	280	420	560	700	V	
<b>VDC</b>	Max DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>I(AV)</b>	Max Average Forward Rectified Current 0.375" (9mm) lead length	1.0							A	TA=55°C
<b>IFSM</b>	Peak Forward Surge Current, 8.3ms single half sine – wave superimposed on rated load	30							A	JEDEC method
<b>TJ,TSTG</b>	Operating and Storage Temperature Range	-65 to +150							°C	

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

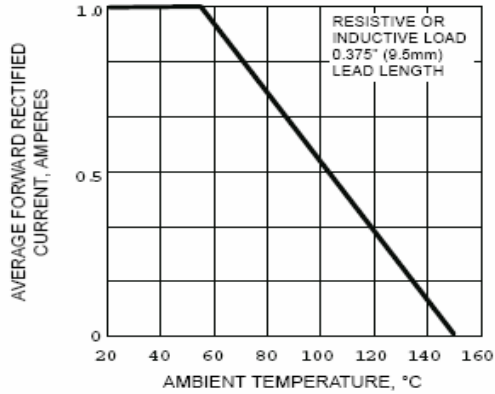
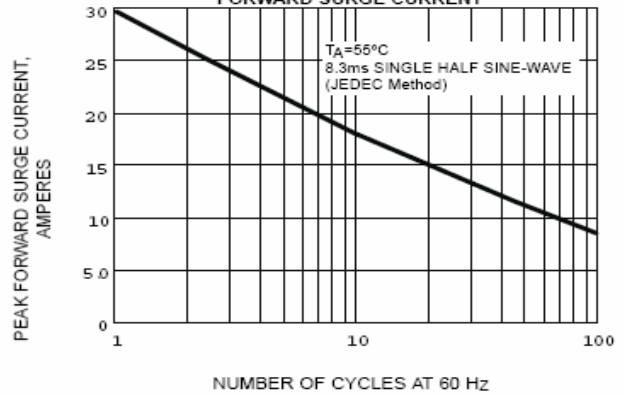
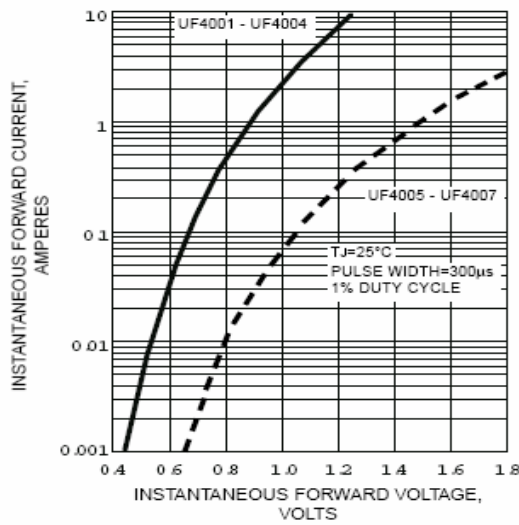
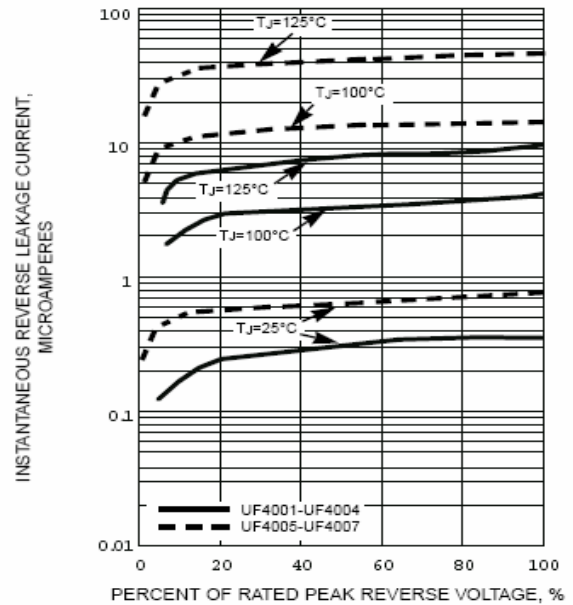
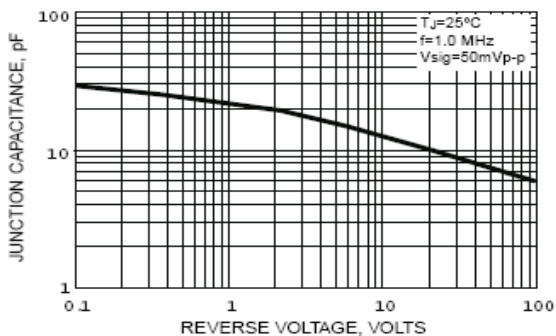
Symbol	Description	UF1001G	UF1002G	UF1003G	UF1004G	UF1005G	UF1006G	UF1007G	Unit	Conditions
<b>VF</b>	Max Instantaneous Forward Voltage	1.0			1.7				V	1.0A
<b>Rθ-JA</b>	Typical Thermal Resistance	60							°C/W	Note 2
<b>IR</b>	Max DC Reverse Current at Rated DC Blocking Voltage	10							μA	TA=25°C
		50								TA=125°C
<b>TRR</b>	Maximum reverse recovery time	50			75				nS	Note 1
<b>CJ</b>	Typical Junction capacitance	15							pF	Measured at 1.0MHz/4.0V

#### Note:

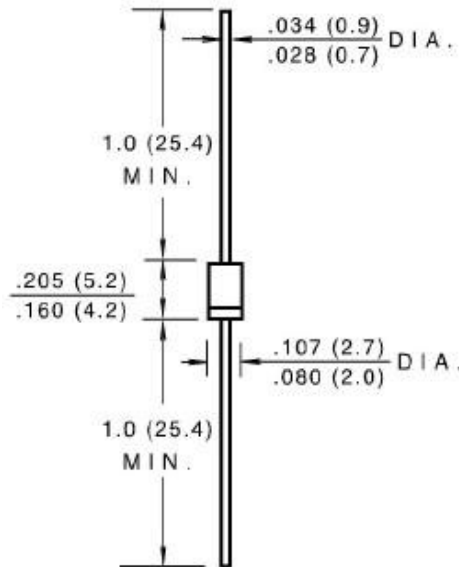
1. Test conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$
2. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, P.C.B mounted.

# UF1001G ~ UF1007G

## RATINGS AND CHARACTERISTIC CURVES UF1001G THRU UF1007G

**FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE**

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

**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS**

**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**


Dimensions in inches (mm)



DO-41

Contact us:

**US HEADQUARTERS**

MEI SEMI INC.

2902 Corvin Drive, Santa Clara, CA95051, USA

Tel: 1-408-733-0808 Fax: 1-408-733-2828