



## Fast Recovery Rectifier

### Features

- Fast switching speed for high efficiency
- 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>Mounting position:</b>	Any
<b>Weight:</b>	0.007 ounce, 0.20 gram

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

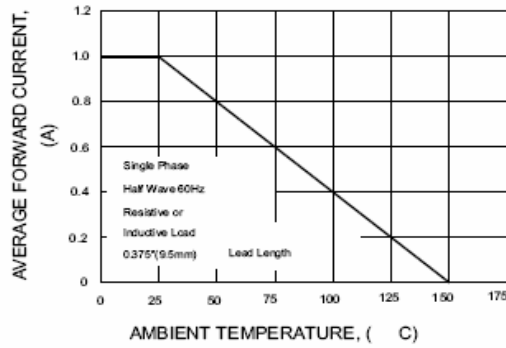
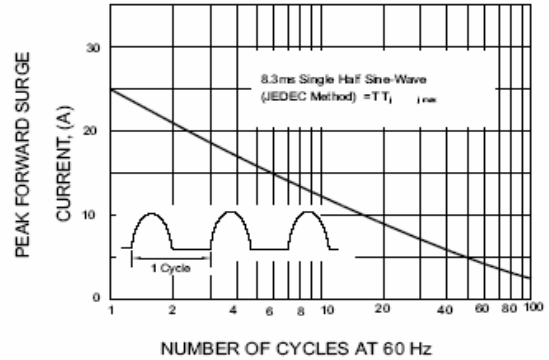
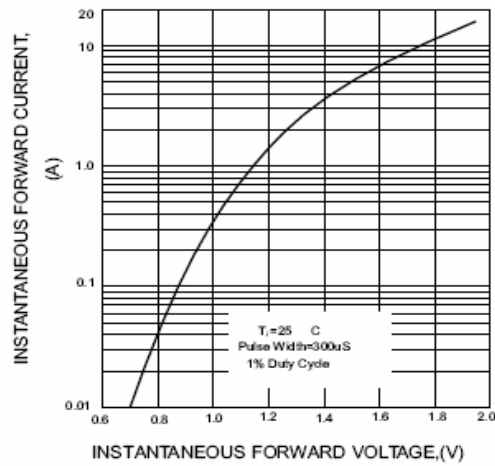
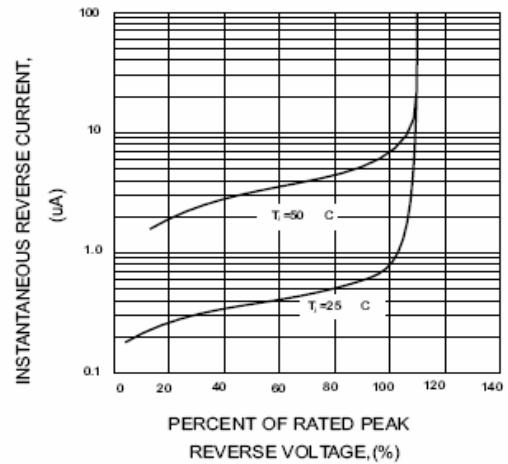
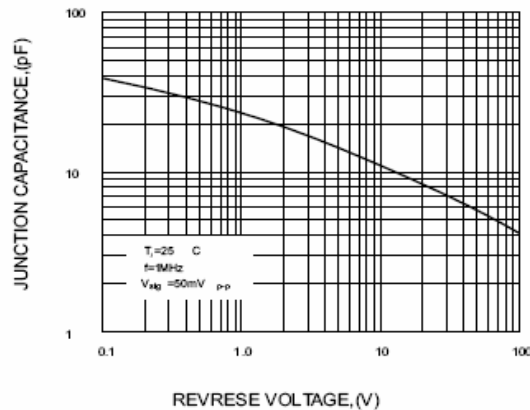
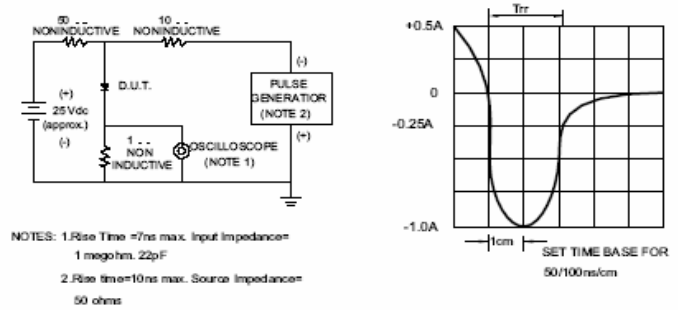
Symbol	Description	1F1	1F2	1F3	1F4	1F5	1F6	1F7	Unit	Conditions
<b>VRRM</b>	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
<b>VRMS</b>	Max RMS Voltage	35	70	140	280	420	560	700	V	
<b>VDC</b>	Max DC Blocking Voltage	50	100	200	400	600	800	1000	V	
<b>I(AV)</b>	Max Average Forward Rectified Current	1.0							A	0.375 (9.5MM) TC=25°C
<b>IFSM</b>	Peak Forward Surge Current	25							A	JEDEC method
<b>TJ,TSTG</b>	Operating and Storage Temperature Range	-65 to +125, -65 to +150							°C	
<b>TRR</b>	Maximum Reverse Recovery Time	150		250		500		Azs	IF=0.5A IR=1.0A IRR=0.25A	

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

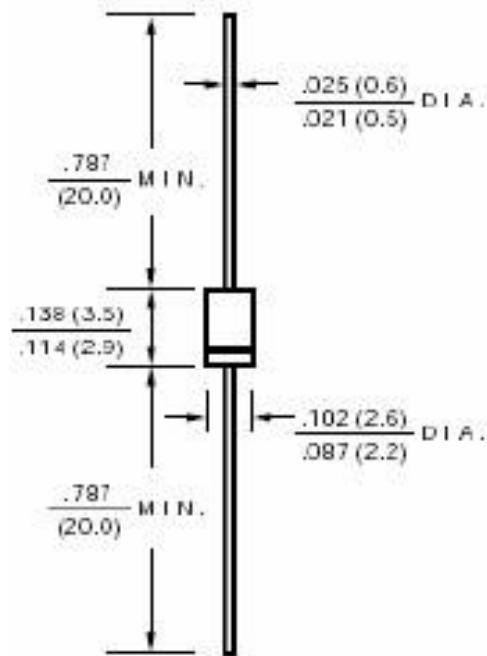
Symbol	Description	1F1	1F2	1F3	1F4	1F5	1F6	1F7	Unit	Conditions
<b>V<sub>F</sub></b>	Max Instantaneous Forward Voltage	1.0							V	Drop per Bridge element 1.0A
<b>I<sub>R</sub></b>	Max DC Reverse Current at Rated DC Blocking Voltage	5.0							μA	T <sub>A</sub> =25°C
		100							mA	T <sub>A</sub> =100°C
<b>R<sub>θ-JA</sub></b>	Typical Thermal Resistance	50							°C/W	Note 1
<b>C<sub>J</sub></b>	Typical Junction Capacitance	15							pF	Measured at 1.0MHz / 4.0V

**Note:**

1. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, PCB mounted.

**RATINGS AND CHARACTERISTIC CURVES 1F1 THRU 1F7**
**FIG.1-TYPICAL 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**

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


Dimensions in inches (mm)



R-1

Contact us:

**US HEADQUARTERS**

MEI SEMI INC.

2902 Corvin Drive, Santa Clara, CA95051, USA

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