



## High Efficiency Rectifier

### Features

- Low power loss, high efficiency
- Low leakage
- High Surge Capacity
- High switching speed
- 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>	0.014 ounce, 0.39 gram

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

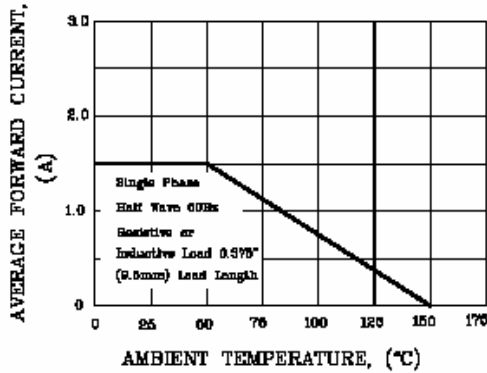
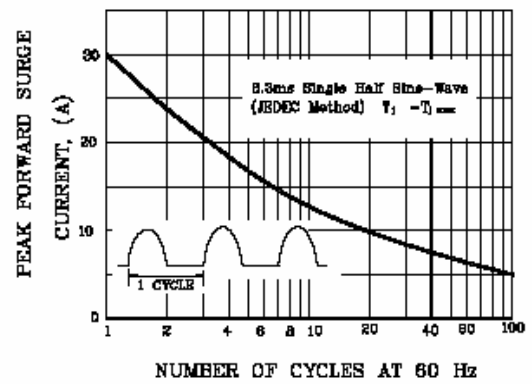
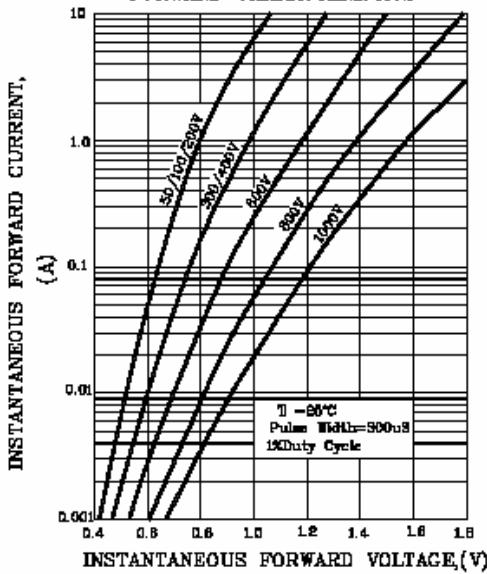
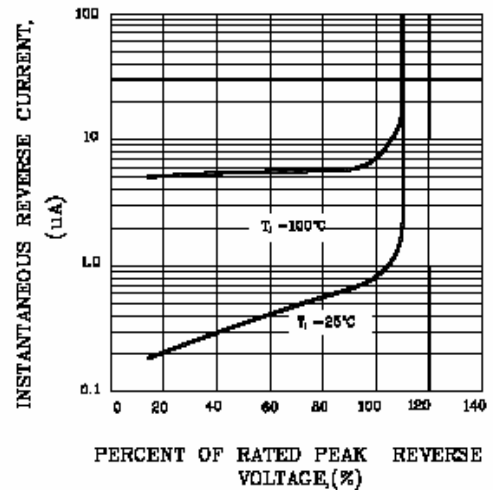
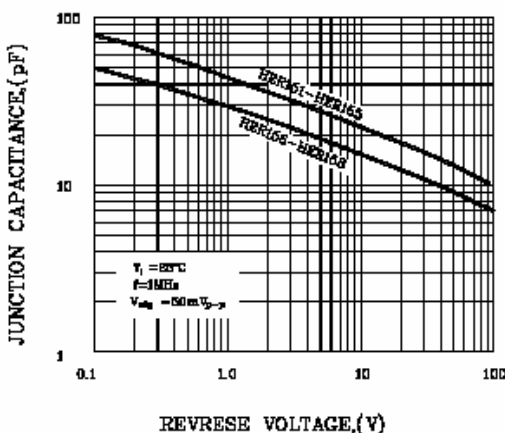
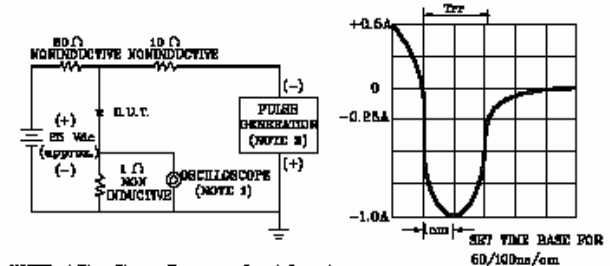
Symbol	Description	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V	
VRMS	Max RMS Voltage	35	70	140	210	280	420	560	700	V	
VDC	Max DC Blocking Voltage	50	100	200	300	400	600	800	1000	V	
I(AV)	Max Average Forward Rectified Current 0.375" (9mm) lead length	2.0								A	TA=50°C
IFSM	Peak Forward Surge Current	60								A	JEDEC method
TJ,TSTG	Operating and Storage Temperature Range	-55 to +150, -55 to +150								°C	
Rθ-JA	Typical Thermal Resistance	40								°C/W	Note 2

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

Symbol	Description	HER 201	HER 202	HER 203	HER 204	HER 205	HER 206	HER 207	HER 208	Unit	Conditions		
V <sub>F</sub>	Max Instantaneous Forward Voltage	1.0		1.3		1.5		1.7		V	2.0A		
I <sub>R(AV)</sub>	Maximum Full Load Reverse Current, Full Cycle average	100										µA	0.375" (9.5mm) lead length at TL= 55°C
I <sub>R</sub>	Max DC Reverse Current at Rated DC Blocking Voltage	5.0										µA	TA=25°C
		250											TA=125°C
TRR	Maximum reverse recovery time	50				70				nS	Note 1		
C <sub>J</sub>	Typical Junction capacitance	30				20				pF	Measured at 1.0MHz / 4.0V		

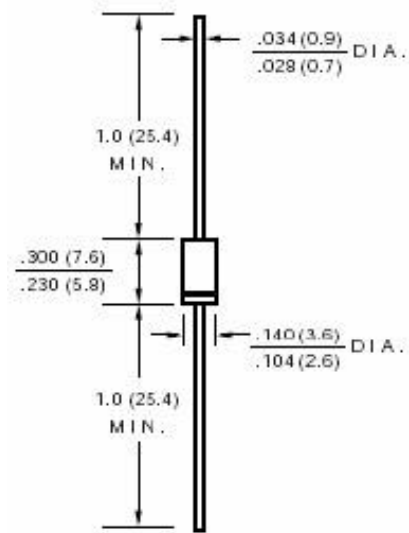
#### Note:

1. Reverse recovery test conditions: I<sub>F</sub>= 0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub> = 0.25A
2. Thermal resistance from junction to ambient with 0.375" (9.5mm) lead length, PCB mounted

**HER201 ~ HER208**
**RATINGS AND CHARACTERISTIC CURVES HER201 THRU HER208**
**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**


NOTE: 1. Rise Time -  $T_{rr}$  max. Input Impedance = 1 megohm 22pF  
2. Rise time - 10ns max. Source Impedance = 50 ohms

Dimensions in inches (mm)



DO-15

Contact us:

**US HEADQUARTERS**

MEI SEMI INC.

2902 Corvin Drive, Santa Clara, CA95051, USA

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