

## HER801 THRU HER808

### 8.0AMPS. GLASS PASSIVATED HIGH EFFICIENT RECTIFIERS

FEATURE	TO-220A																																														
	<ul style="list-style-type: none"> <li>Low forward voltage drop;</li> <li>High current capability;</li> <li>High reliability;</li> <li>High surge current capability;</li> <li>Epitaxial construction.</li> <li>High temperature soldering guaranteed: 260°C /10sec/0.16" (4.06mm) from case.</li> </ul>																																														
<ul style="list-style-type: none"> <li>Terminals: Lead solderable per MIL-STD-202, method 208 guaranteed.</li> <li>Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy</li> <li>Polarity: As Marked</li> <li>Mounting position: Any</li> </ul>	<table border="1"> <thead> <tr> <th>Dim</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>A</td><td>14.9</td><td>15.8</td></tr> <tr><td>B</td><td>-----</td><td>10.5</td></tr> <tr><td>C</td><td>2.62</td><td>2.87</td></tr> <tr><td>D</td><td>3.56</td><td>4.06</td></tr> <tr><td>E</td><td>13.0</td><td>14.3</td></tr> <tr><td>F</td><td>0.68</td><td>0.94</td></tr> <tr><td>G</td><td>Ø3.74</td><td>Ø3.91</td></tr> <tr><td>H</td><td>5.84</td><td>6.86</td></tr> <tr><td>I</td><td>4.44</td><td>4.86</td></tr> <tr><td>J</td><td>2.54</td><td>2.79</td></tr> <tr><td>K</td><td>0.35</td><td>0.64</td></tr> <tr><td>L</td><td>1.14</td><td>1.40</td></tr> <tr><td>P</td><td>5.20</td><td>4.95</td></tr> <tr><td>M</td><td>-----</td><td>0.50</td></tr> </tbody> </table>		Dim	Min	Max	A	14.9	15.8	B	-----	10.5	C	2.62	2.87	D	3.56	4.06	E	13.0	14.3	F	0.68	0.94	G	Ø3.74	Ø3.91	H	5.84	6.86	I	4.44	4.86	J	2.54	2.79	K	0.35	0.64	L	1.14	1.40	P	5.20	4.95	M	-----	0.50
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Dimensions in inches and (millimeters)																																															

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

Type Number	SYM BOL	HER 801	HER 802	HER 803	HER 804	HER 805	HER 806	HER 807	HER 808	unit s	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	V	
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	420	560	700	V	
Maximum DC blocking Voltage	$V_{DC}$	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_c=100\text{C}$	$I_{F(AV)}$	8.0								A	
Peak Forward Surge Current 8.3ms singlehalf sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	150.0								A	
Maximum Forward Voltage at 8.0A DC	$V_F$	1.0			1.3		1.7			V	
Maximum DC Reverse Current@ $T_a=25^\circ\text{C}$ at rated DC blocking voltage@ $T_a=100^\circ\text{C}$	$I_R$	10.0					400				uA uA
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	50					75				ns
Typical Junction Capacitance (Note2)	$C_J$	80					50				pF
Typical Thermal Resistance (Note3)	$R_{(JA)}$	3.0								°C/W	
Storage Temperature	$T_{STG}$	-55 to +150								°C	
Operating Junction Temperature	$T_J$	-55 to +150								°C	

#### Note:

- Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance From Junction to Case Mounted on Heatsink.

**RATING AND CHARACTERISTIC CURVES (HER801 THRU HER808)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

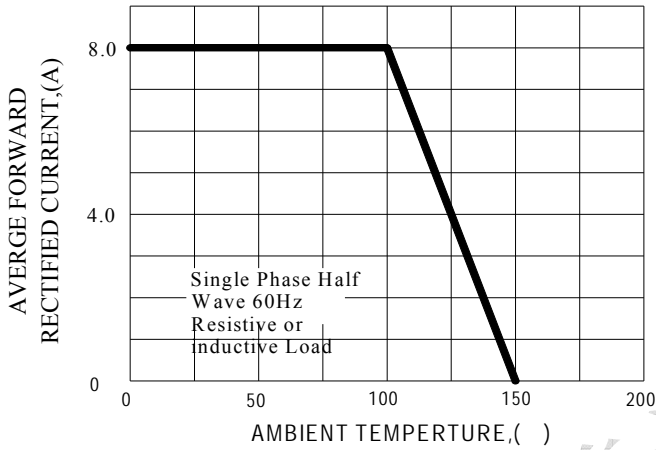


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

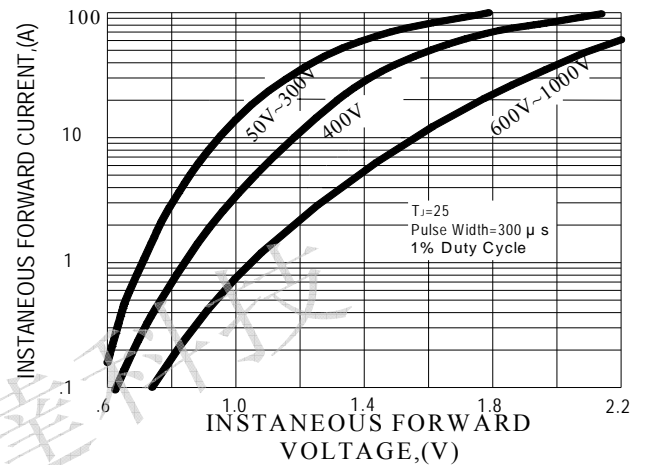


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

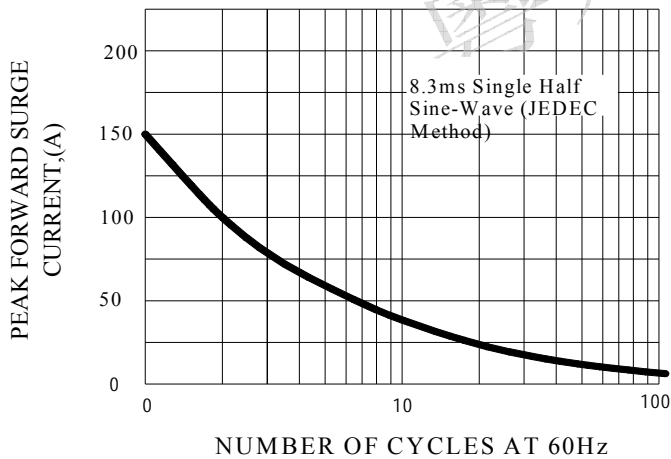


FIG.4-TYPICAL REVERSE CHARACTERISTICS

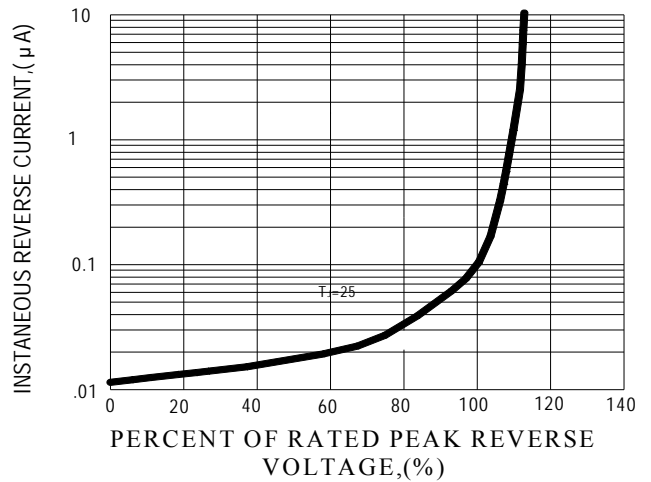


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

