

## High Efficiency Glass Passivated Rectifiers

REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 5.0 Amperes

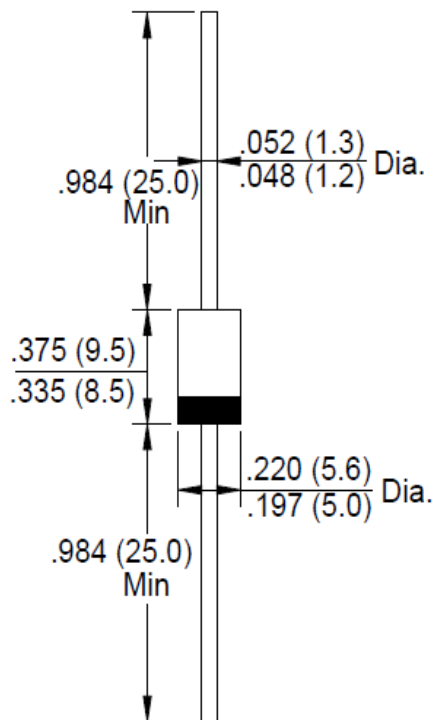
### FEATURES

- High speed switching for high efficiency
- Low leakage current
- High forward surge capability
- Solder dip 260 °C, 40 s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

### MECHANICAL DATA

- Case: JEDEC DO-27 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 1.1 grams

### DO-27



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%

CHARACTERISTICS	SYMBOL	HER 501G	HER 502G	HER 503G	HER 504G	HER 505G	HER 506G	HER 507G	HER 508G	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =50 °C	I <sub>(AV)</sub>	5.0								A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	200								A
Peak Forward Voltage at 5.0A DC	V <sub>F</sub>	1.0			1.3		1.7			V
Maximum DC Reverse Current @T <sub>A</sub> =25°C at Rated DC Blocking Voltage @T <sub>A</sub> =100°C	I <sub>R</sub>	10 200								uA
Maximum Reverse Recovery Time (Note1)	T <sub>RR</sub>	50					75			nS
Typical Junction Capacitance (Note2)	C <sub>J</sub>	100					65			pF
Typical Thermal Resistance (Note3)	R <sub>θJA</sub>	10								°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C

NOTES: 1.Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A , I<sub>RR</sub>=0.25A

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

4.The typical data above is for reference only(典型值仅供参考).

HER5\*G-A-00-00

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FIG. 1 – FORWARD CURRENT DERATING CURVE

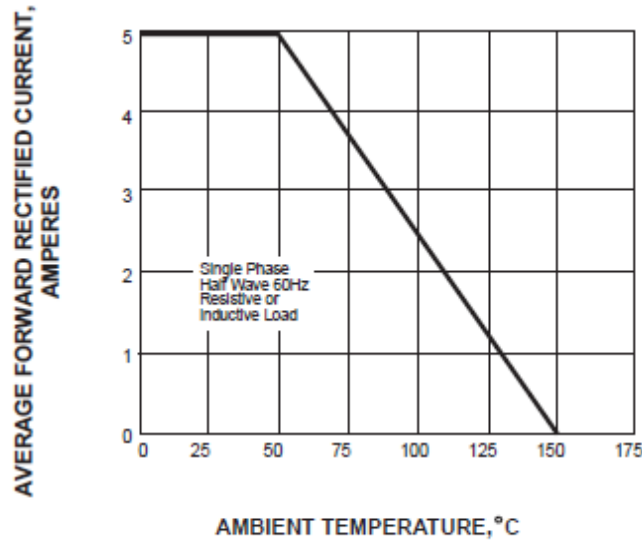


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

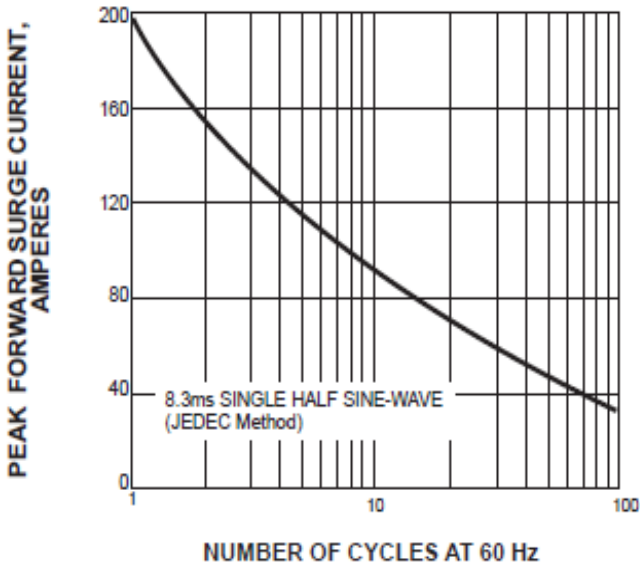


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

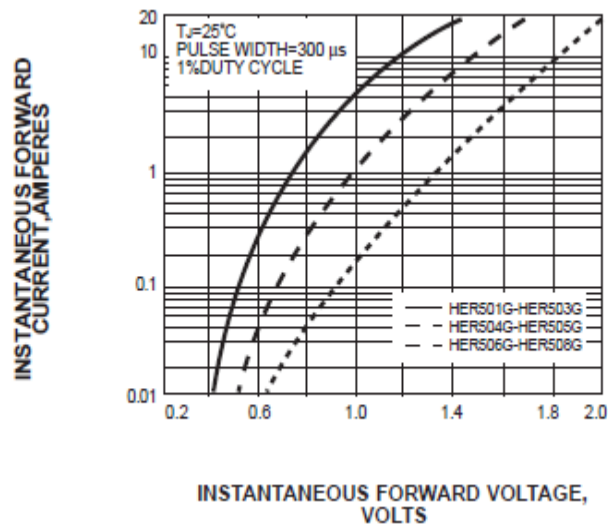
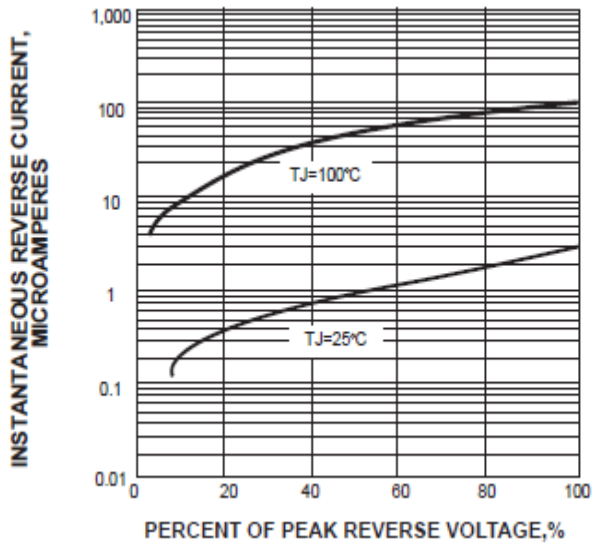


FIG.4-TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only. 曲线图仅供参考。

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