

Features

- * Glass passivated chip junction
- * High efficiency, low VF
- * High current capability
- * High Reliability
- * High Surge Current Capability
- * For use in low voltage, high frequency inverter, Free wheeling, and polarity protection application



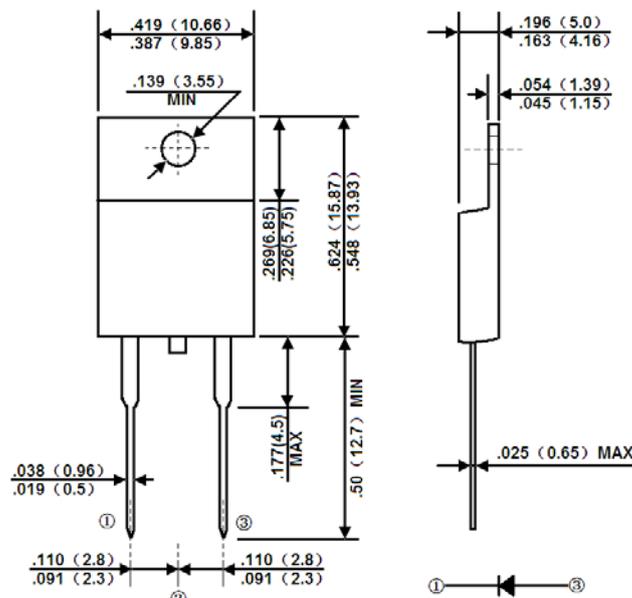
RoHS
COMPLIANT

Mechanical Data

- * Case: TO-220AC
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity: As marked
- * High temperature soldering: 260°C/10 seconds/ 0.16",(4.06mm) from case

Package Outline Dimensions in inches (millimeters)

TO-220AC:



Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	HERA 801G	HERA 802G	HERA 803G	HERA 804G	HERA 805G	HERA 806G	HERA 807G	HERA 808G	Unit	
Maximum Repetitive 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 D.C Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	8								A	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150								A	
Maximum Instantaneous Forward Voltage (Note 1) @ 8A	V_F	1.0			1.3		1.7			V	
Maximum D.C Reverse Current @ $T_A=25^\circ\text{C}$ at Rated D.C Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	10 400								μA	
Maximum Reverse Recovery Time (Note 2)	T_{rr}	50					80				nS
Typical Junction Capacitance (Note 3)	C_j	65					55				pF
Typical Thermal Resistance	$R_{\theta JC}$	2								$^\circ\text{C/W}$	
Operating and Storage Temperature Range	T_J/T_{STG}	-55 to +150								$^\circ\text{C}$	

Note:1、 Pulse Test with PW=300 usec, 1% Duty Cycle 2、 Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=0.25A
3、 Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Ratings and Characteristic Curves

FIG. 1 FORWARD CURRENT DERATING CURVE

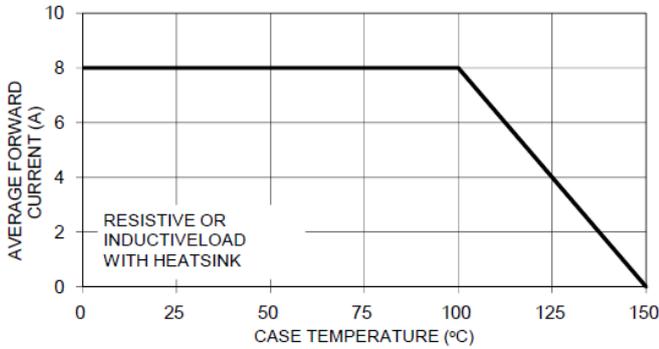


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

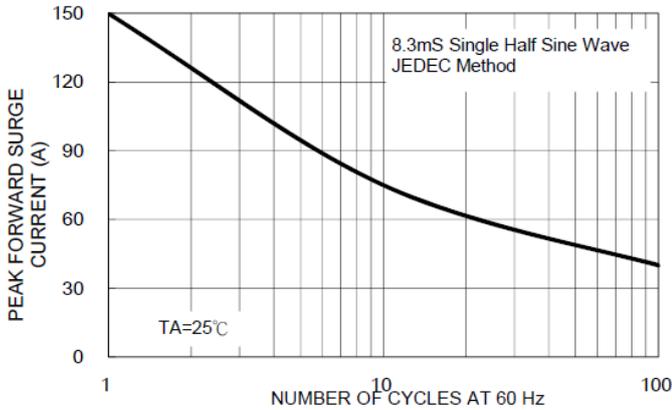


FIG. 4 TYPICAL JUNCTION CAPACITANCE

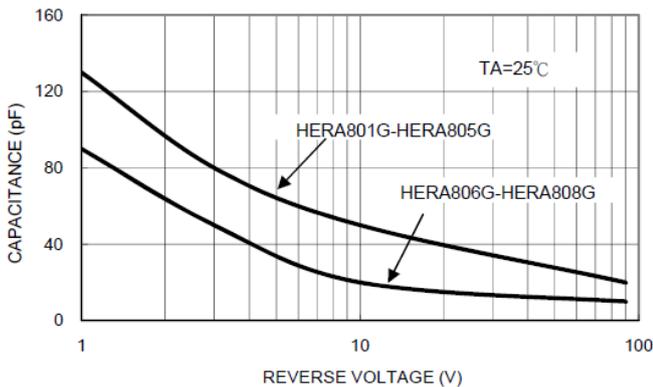


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

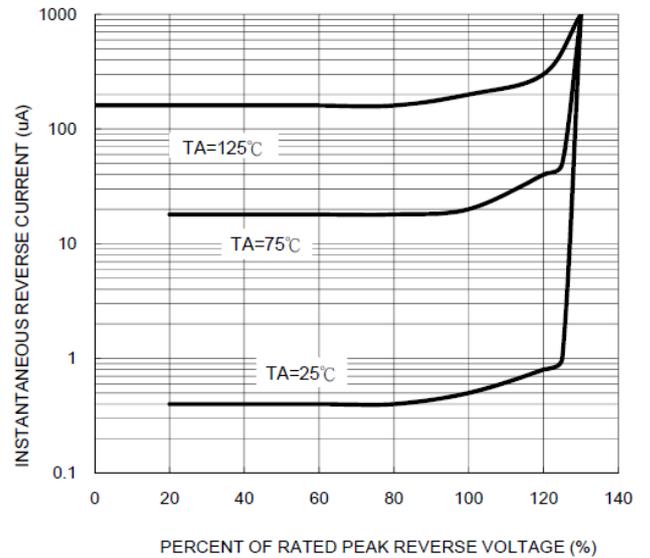


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

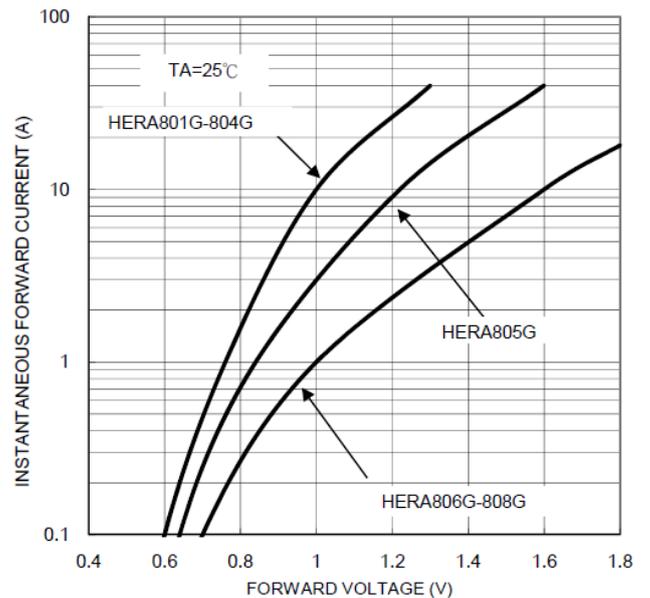
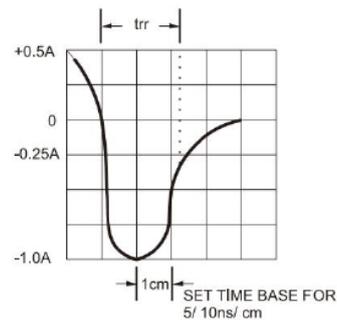
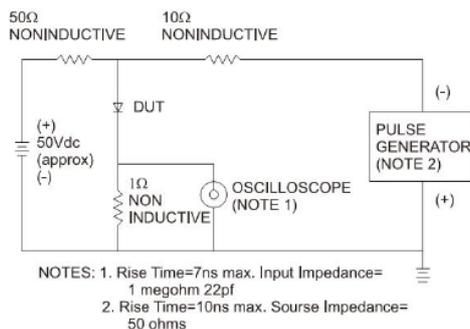


FIG. 6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





HERA801G THRU HERA808G

Glass Passivated High Efficient Rectifiers

Ordering Information

Part No.	Package	Packing
HERA801G~HERA808G	TO-220AC	50pcs/Tube