

HERA801G - HERA808G

8.0 AMPS. Glass Passivated High Efficient Rectifiers

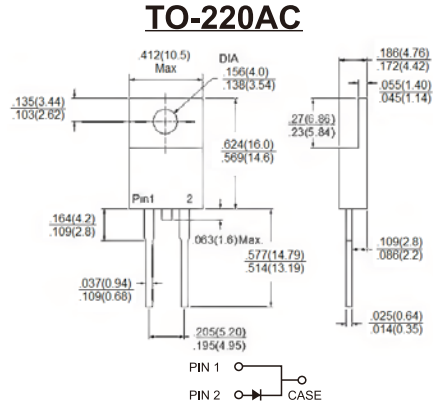


Features

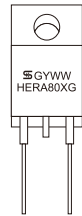
- ✦ UL Recognized File # E-326243
- ✦ Glass passivated chip junction.
- ✦ High efficiency, Low VF
- ✦ High current capability
- ✦ High reliability
- ✦ High surge current capability
- ✦ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.
- ✦ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ✦ Cases: TO-220AC Molded plastic
- ✦ Epoxy: UL 94V0 rate flame retardant
- ✦ Terminals: Pure tin plated, lead free solderable per MIL-STD-202, Method 208 guaranteed
- ✦ Polarity: As marked
- ✦ High temperature soldering guaranteed: 260°C/10 seconds .16", (4.06mm) from case.
- ✦ Weight: 2.24 grams



Dimensions in inches and (millimeters)



Marking Diagram

- HERA80XG = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

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	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @T _C =100 °C	I _{F(AV)}	8.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150								A
Maximum Instantaneous Forward Voltage @8.0A	V _F	1.0			1.3		1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _A =25 °C (Note 1) @ T _A =125 °C	I _R	10				400			uA uA	
Maximum Reverse Recovery Time (Note 4)	T _{rr}	50				80			nS	
Typical Junction Capacitance (Note 2)	C _j	65				55			pF	
Typical Thermal Resistance (Note 3)	R _{θJC}	2.0								°C/W
Operating Temperature Range	T _J	-65 to +150								°C
Storage Temperature Range	T _{STG}	-65 to +150								°C

- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
 3. Mounted on Heatsink Size of 2 in x 3 in x 0.25 in Al-Plate.
 4. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

RATINGS AND CHARACTERISTIC CURVES (HERA801G THRU HERA808G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

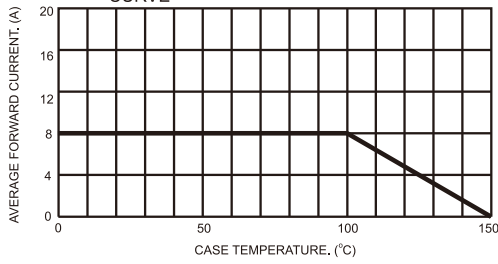


FIG.2- TYPICAL REVERSE CHARACTERISTICS

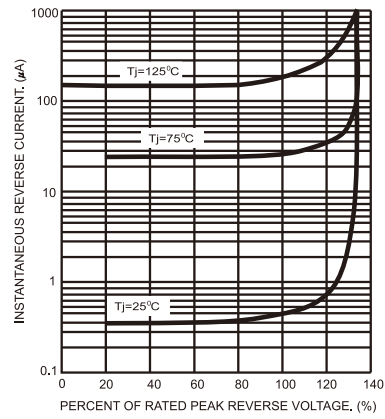


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

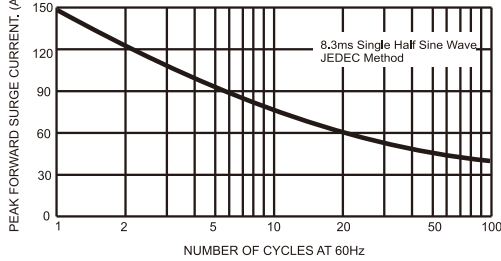


FIG.5- TYPICAL FORWARD CHARACTERISTICS

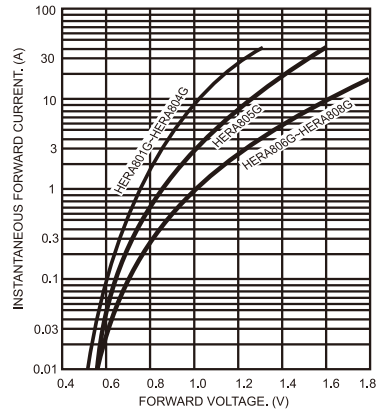


FIG.4- TYPICAL JUNCTION CAPACITANCE

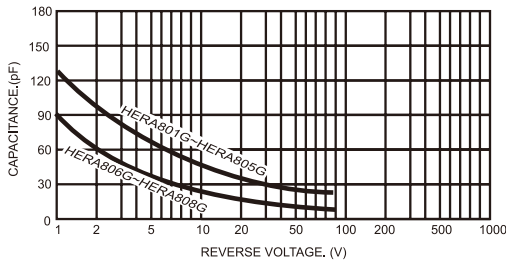
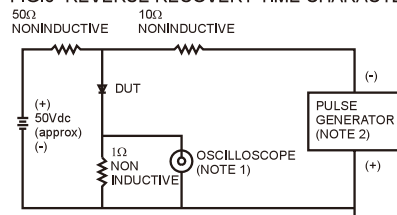


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Source Impedance= 50 ohms

