

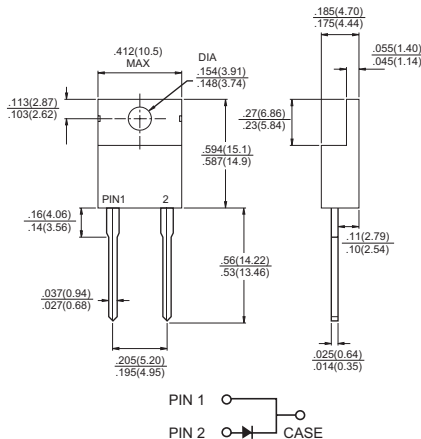


Features

- ✦ 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.

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"(.406mm) from case.
- ✦ Weight: 2.24 grams



Dimensions in inches and (millimeters)

Maximum Rating 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	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 @ $T_C = 100^\circ C$	$I_{(AV)}$	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 @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$	I_R	10 400								 uA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	50					80			nS
Typical Junction Capacitance (Note 2)	C_j	65					55			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2.0								°C/W
Operating Temperature Range	T_J	-65 to +150								°C
Storage Temperature Range	T_{STG}	-65 to +150								°C

- Notes:
1. Reverse Recovery Test Conditions: $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$
 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.

RATINGS AND CHARACTERISTIC CURVES (HERA801G THRU HERA808G)

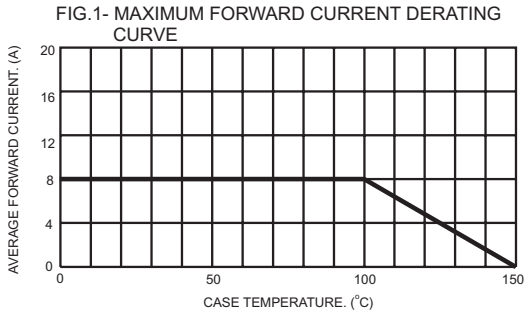


FIG.2- TYPICAL REVERSE CHARACTERISTICS

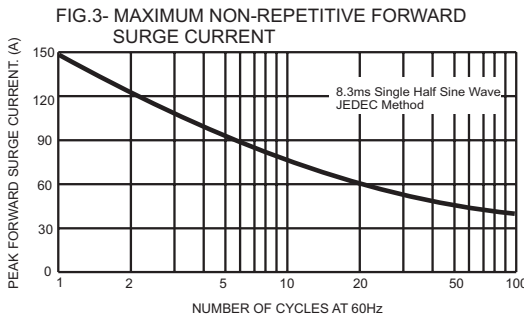
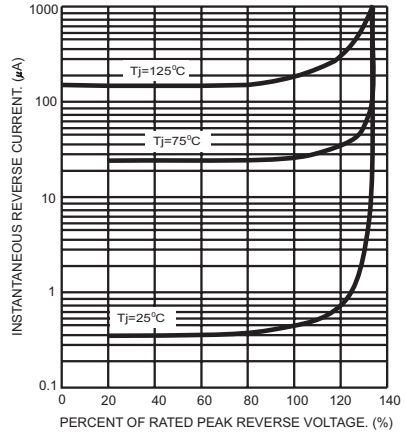


FIG.5- TYPICAL FORWARD CHARACTERISTICS

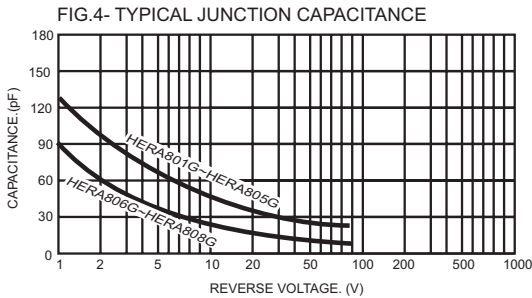
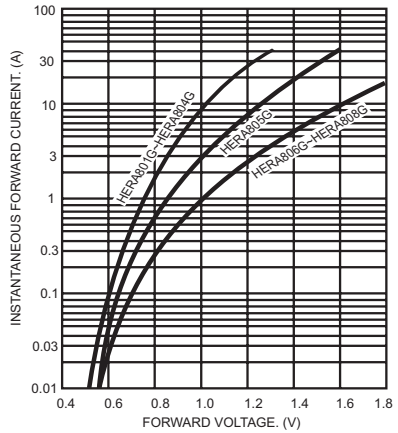


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

