



HERAF1001G - HERAF1008G

Isolated 10.0 AMPS. Glass Passivated High Efficient Rectifiers

ITO-220AC

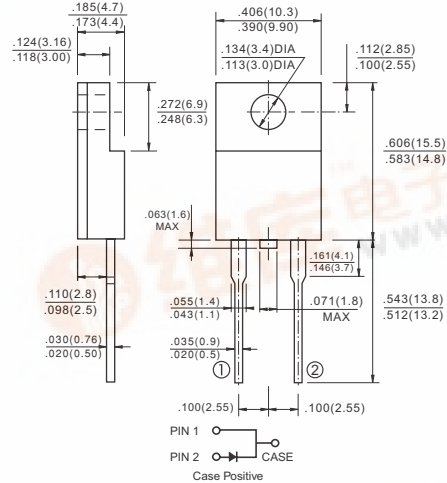


Features

- ✧ 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: ITO-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 0.25", (6.35mm) from case.
- ✧ Mounting torque : 5 in – 1bs. max.
- ✧ Weight: 2.24 grams



Dimensions in inches and (millimeters)

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	HERAF 1001G	HERAF 1002G	HERAF 1003G	HERAF 1004G	HERAF 1005G	HERAF 1006G	HERAF 1007G	HERAF 1008G	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 @T _C =100 °C	I _(AV)	10								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 @10.0A	V _F	1.0				1.3	1.7			V
Maximum DC Reverse Current @T _A =25 °C at Rated DC Blocking Voltage @ T _A =125 °C	I _R	10 400								uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50					80			nS
Typical Junction Capacitance (Note 2)	C _j	80					60			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. 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 (HERAF1001G THRU HERAF1008G)

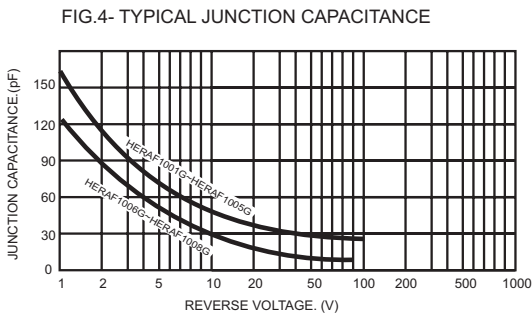
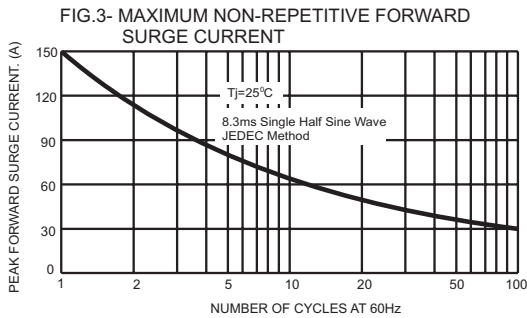
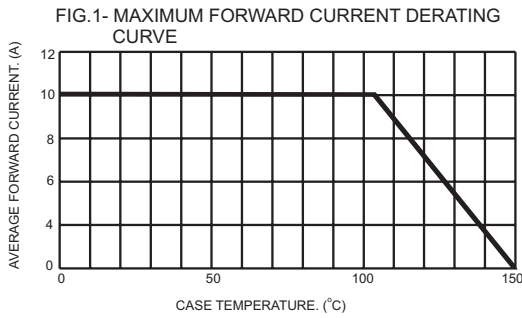


FIG.2- TYPICAL REVERSE CHARACTERISTICS

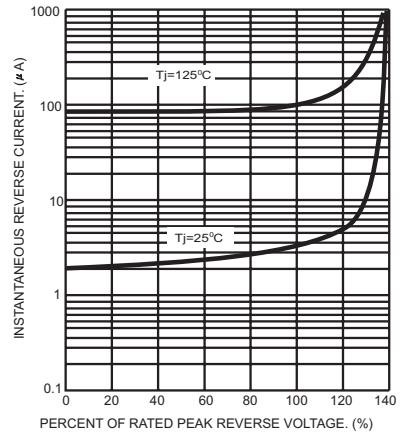


FIG.5- TYPICAL FORWARD CHARACTERISTICS

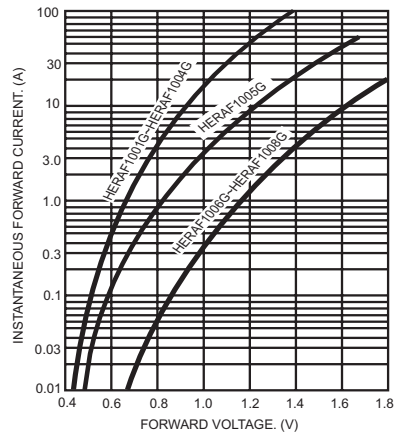


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

