

HERAF1001G - HERAF1008G



Isolated 10.0 AMPS. Glass Passivated High Efficient Rectifiers
ITO-220AC

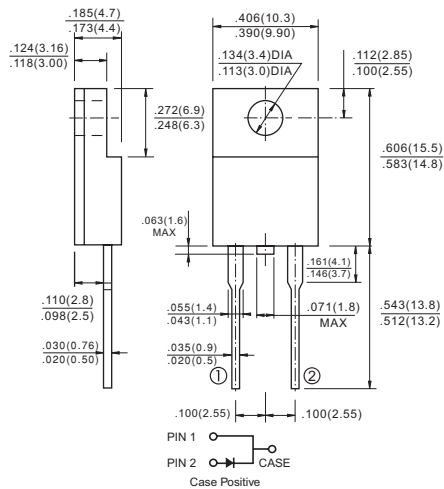


Features

- ◇ 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	HERAF	HERAF	HERAF	HERAF	HERAF	HERAF	HERAF	Units
		1001G	1002G	1003G	1004G	1005G	1006G	1007G	1008G	
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 @ $T_C = 100^\circ\text{C}$	$I_{(AV)}$	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 @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	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)	$R_{\theta JC}$	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 (HERAF1001G THRU HERAF1008G)

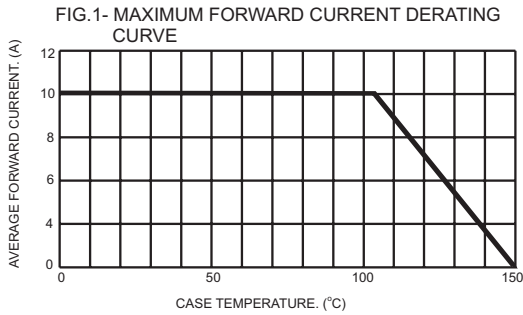


FIG.2- TYPICAL REVERSE CHARACTERISTICS

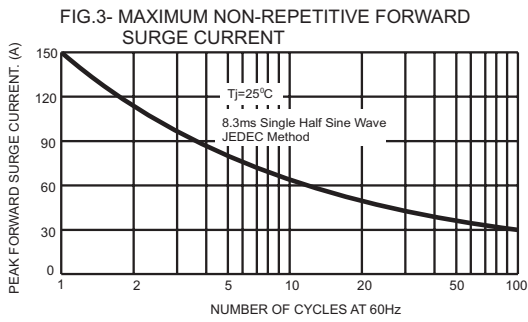
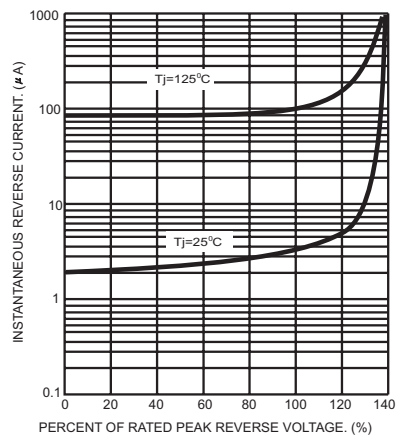


FIG.5- TYPICAL FORWARD CHARACTERISTICS

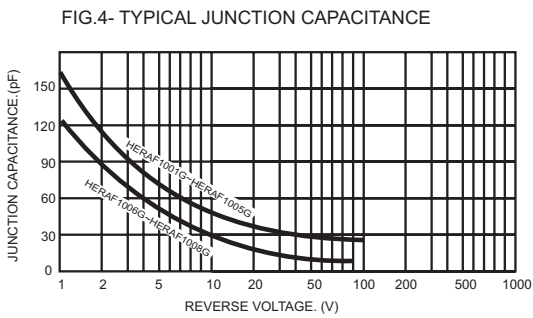
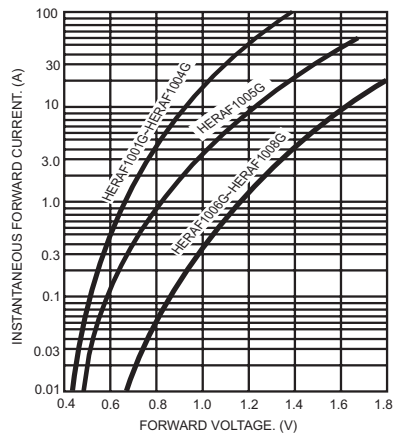


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

