

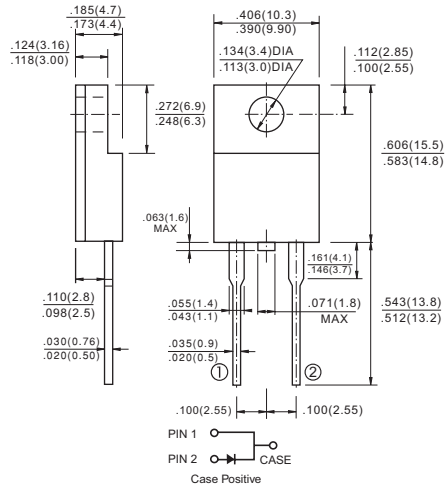


Features

- ✦ 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 @ $T_C = 100^\circ C$	$I_{(AV)}$	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 @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$	I_R	10 400								μA μA	
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									$^\circ C/W$
Operating Temperature Range	T_J	-65 to +150									$^\circ C$
Storage Temperature Range	T_{STG}	-65 to +150									$^\circ C$

- 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)

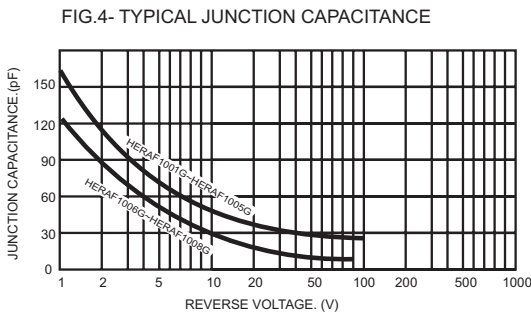
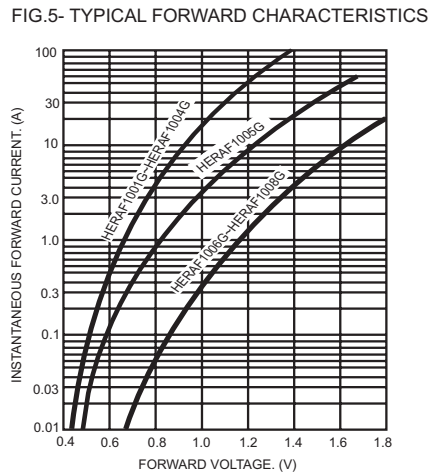
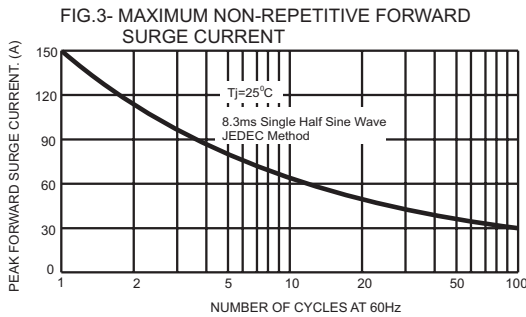
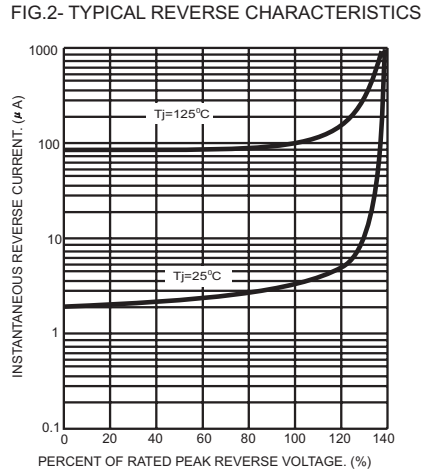
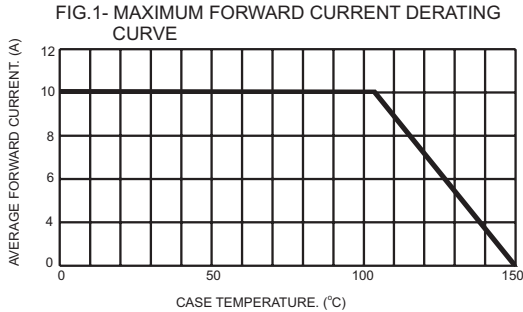


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

