



HERAF1601G - HERAF1608G

Isolated 16.0 AMPS.

Glass Passivated High Efficient Rectifiers

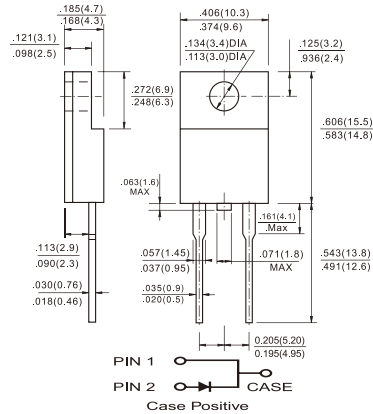
ITO-220AC

Features

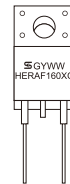
- ◇ UL Recognized File # E-326243
- ◇ Glass passivated chip junction.
- ◇ High efficiency, Low VF
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.
- ◇ Green compound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

Mechanical Data

- ◇ Cases: 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)
Marking Diagram



HERAF160XG= 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	HERAF 1601G	HERAF 1602G	HERAF 1603G	HERAF 1604G	HERAF 1605G	HERAF 1606G	HERAF 1607G	HERAF 1608G	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 @T _C =100°C	I _{F(AV)}	16								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	250								A
Maximum Instantaneous Forward Voltage @16.0A	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	150				110			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 (HERAF1601G THRU HERAF1608G)

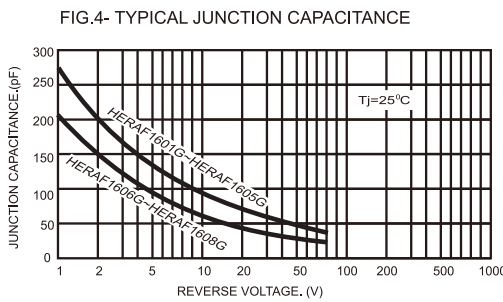
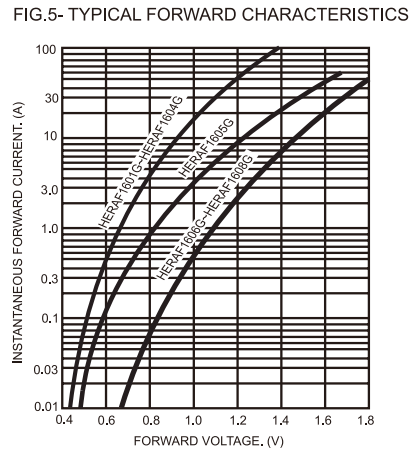
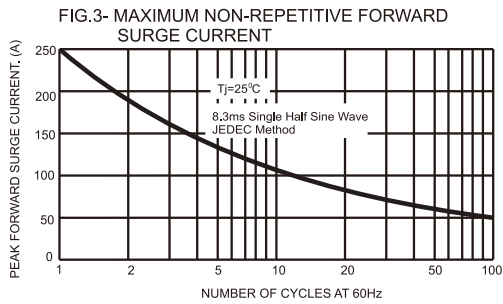
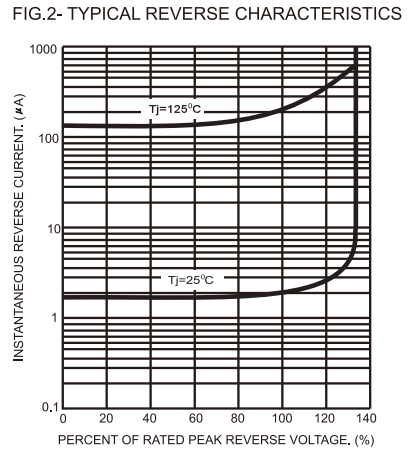
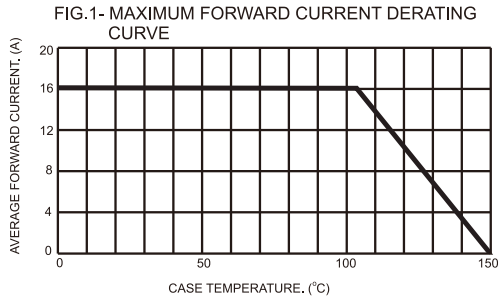


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

