



Features

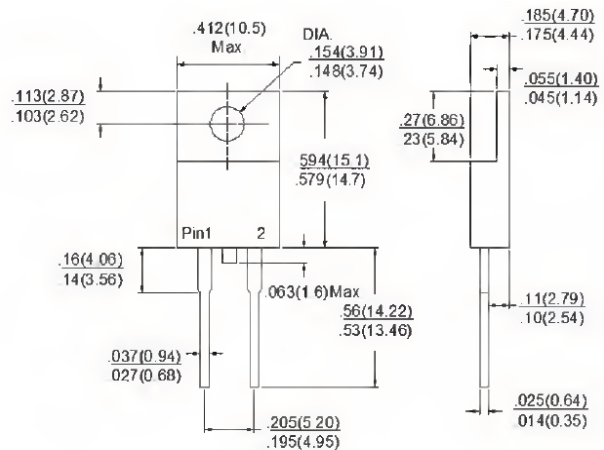
- ◇ Glass passivated chip junction
- ◇ High efficiency, Low VF
- ◇ High current capability
- ◇ High reliability
- ◇ High surge current capability
- ◇ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application
- ◇ Green compound with suffix "G" on packing code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

Mechanical Data

- ◇ Cases: TO-220AC Molded plastic
- ◇ Epoxy: UL 94V-0 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", (4.06mm) from case
- ◇ Weight: 2.24 grams

HERA1601G - HERA1608G 16.0AMPS. Glass Passivated High Efficient Rectifiers

TO-220AC



Dimensions in inches and (millimeters)

Marking Diagram



- HERA160XG = 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	HERA 1601G	HERA 1602G	HERA 1603G	HERA 1604G	HERA 1605G	HERA 1606G	HERA 1607G	HERA 1608G	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	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 (Note 1) @ 16 A	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 2)	T _{rr}	50					80			nS
Typical Junction Capacitance (Note 3)	C _j	120					80			pF
Typical Thermal Resistance	R _{θJC}	2.0								°C/W
Operating Temperature Range	T _J	- 65 to + 150								°C
Storage Temperature Range	T _{STG}	- 65 to + 150								°C

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $IRR=0.25\text{A}$

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (HERA1601G THRU HERA1608G)

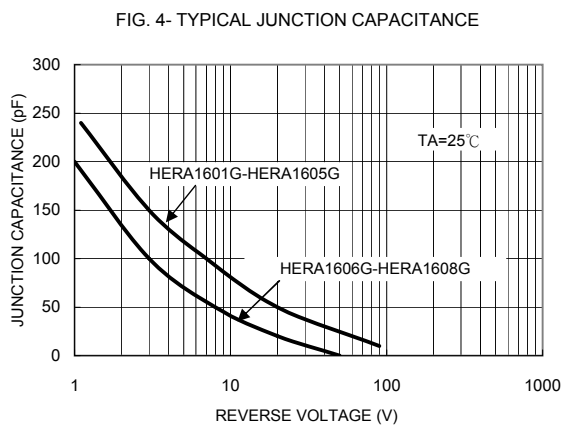
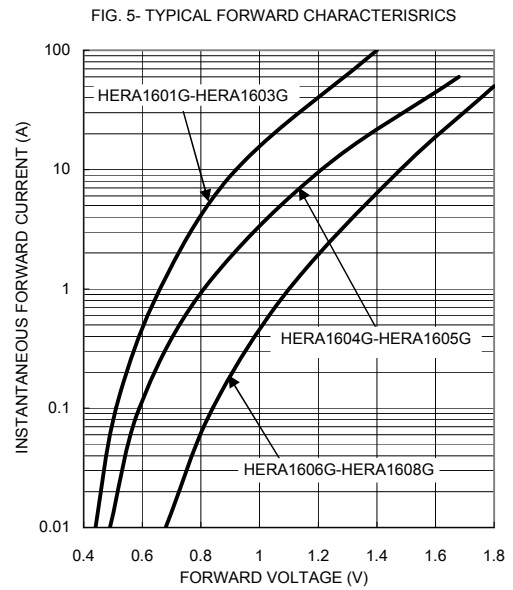
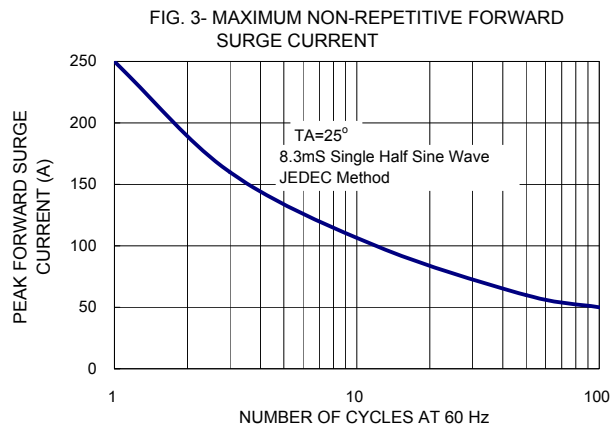
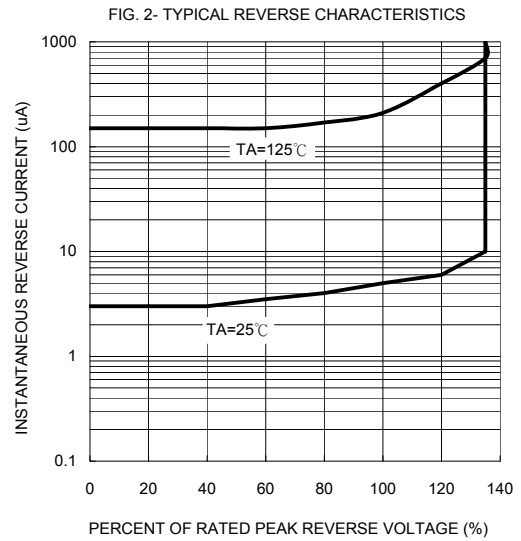
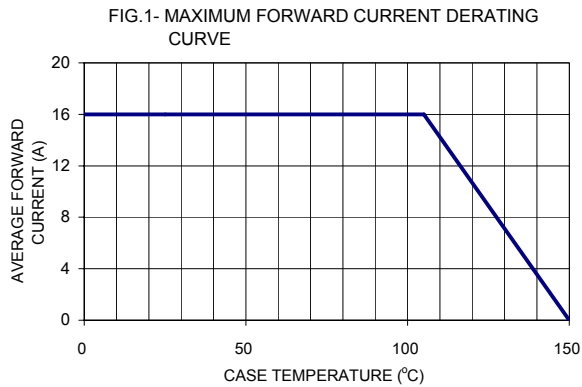


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

