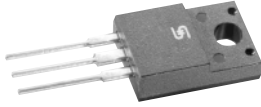




# HERF1001G THRU HERF1008G

Isolation 10.0 AMPS. Glass Passivated High Efficient Rectifiers

Preliminary



Voltage Range  
50 to 1000 Volts  
Current  
10.0 Amperes

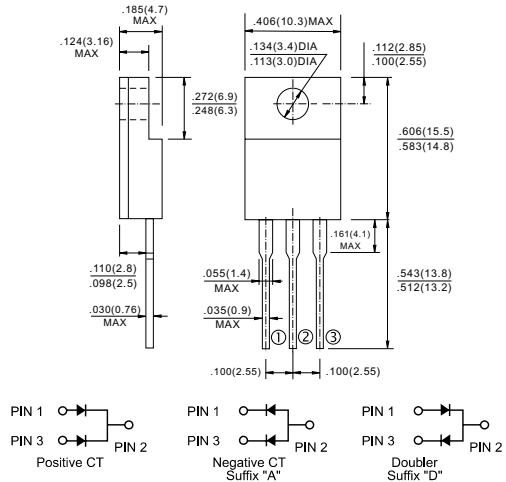
## Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

## Mechanical Data

- ✧ Case: ITO-220AB molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 250°C/ 0.25" (6.35mm) from case for 10 seconds.
- ✧ Mounting torque: 5 in – 1bs. max.
- ✧ Weight: 2.24 grams

## ITO-220AB



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	HERF 1001G	HERF 1002G	HERF 1003G	HERF 1004G	HERF 1005G	HERF 1006G	HERF 1007G	HERF 1008G	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @ T <sub>C</sub> = 100°C	10.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	125								A
Maximum Instantaneous Forward Voltage @ 5.0A	1.0		1.3		1.7				V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C	10.0				400				μA
Maximum Reverse Recovery Time ( Note 1 )	50				80				nS
Typical Junction Capacitance ( Note 2 )	80				50				pF
Typical Thermal Resistance RθJC (Note 3)	5.0								°C/W
Operating Temperature Range T <sub>J</sub>	-65 to +150								°C
Storage Temperature Range T <sub>STG</sub>	-65 to +150								°C

Notes: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

3. Thermal Resistance from Junction to Case per Leg Mounted on Heatsink.

## RATINGS AND CHARACTERISTIC CURVES (HERF1001G THRU HERF1008G)

FIG. 1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

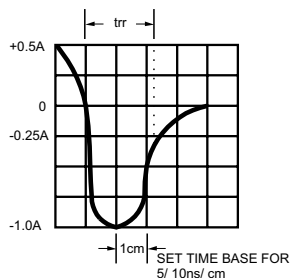
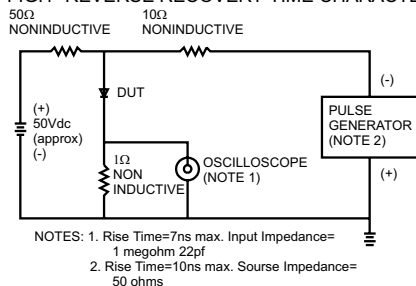


FIG. 2- MAXIMUM FORWARD CURRENT DERATING CURVE

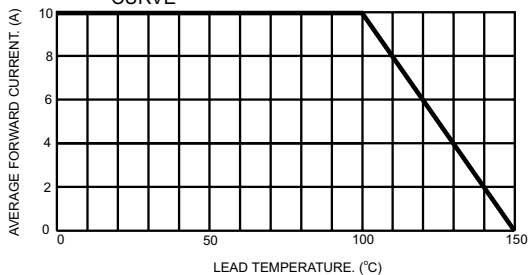


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

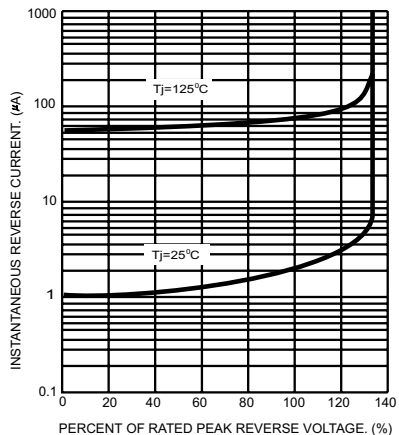


FIG. 4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

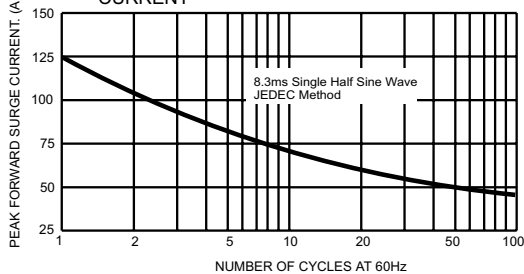


FIG. 6- TYPICAL FORWARD CHARACTERISTICS

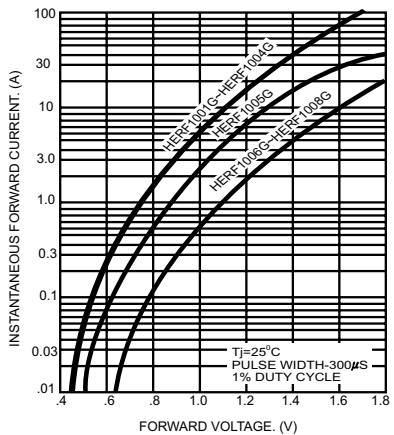


FIG. 5- TYPICAL JUNCTION CAPACITANCE

