



HER1601G THRU HER1608G

**16.0 AMPS. GLASS PASSIVATED
HIGH EFFICIENT RECTIFIERS**

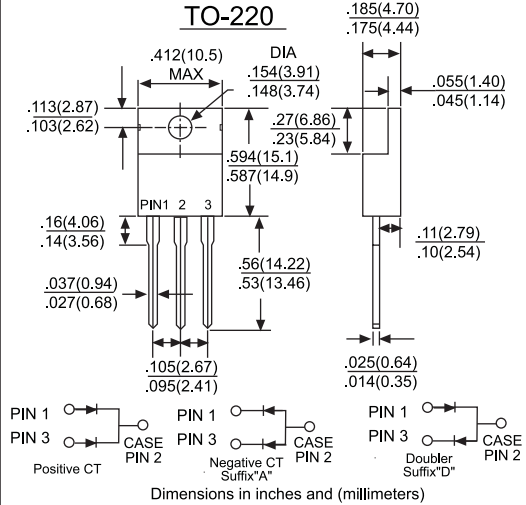
**Voltage Range
50 to 1000 Volts
Current
16.0 Amperes**

Features

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

Mechanical Data

- Cases: TO-220 molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: As marked
- High temperature soldering guaranteed: 250°C/10 seconds/.16", (4.06mm) from case.
- Weight: 2.24 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number		HER 1601G	HER 1602G	HER 1603G	HER 1604G	HER 1605G	HER 1606G	HER 1607G	HER 1608G	UNITS	
Maximum Repetitive 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 .375"(9.5mm) Lead Length @T _A = 55°C	I _{F(AV)}	16.0								A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	125								A	
Maximum Instantaneous Forward Voltage @6.0A	V _F	1.0			1.3		1.7			V	
Maximum DC Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage @ T _A = 100°C	I _R					10.0 400					µA µA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	50			80						nS
Typical Junction Capacitance (Note 2)	C _J	80			50						pF
Typical Thermal Resistance (Note 3)	R _{θJC}	3.0								°C/W	
Operating Temperature Range	T _J	-55 to +150								°C	
Storage Temperature Range	T _{STG}	-55 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 4.0 V D.C.
3. Thermal Resistance from Junction to Case per Leg Mounted on Heatsink.

RATING AND CHARACTERISTIC CURVES HER1601G THRU HER1608G



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

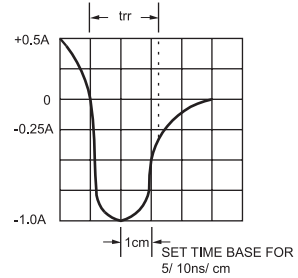
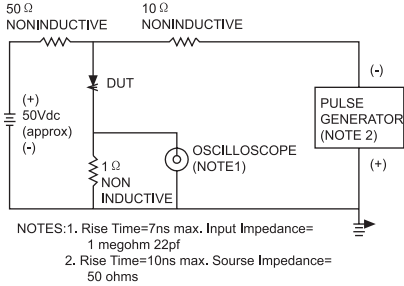


FIG.3-TYPICAL REVERSE CHARACTERISTICS PER LEG

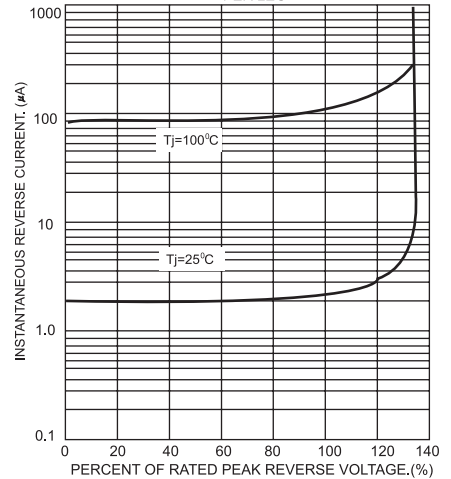


FIG.6-TYPICAL FORWARD CHARACTERISTICS PER LEG

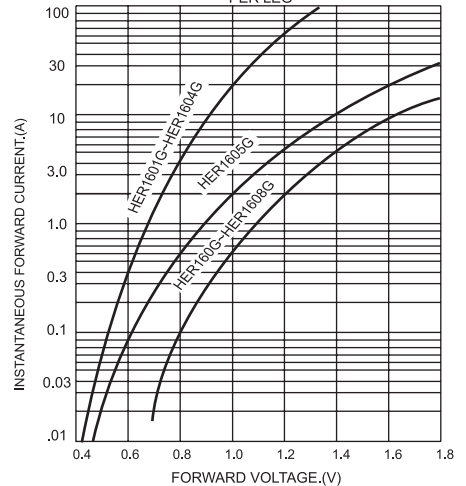


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

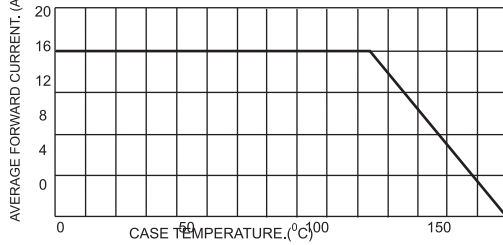


FIG.5-MAXIMUM NON-REPETITIVE SURGE CURRENT

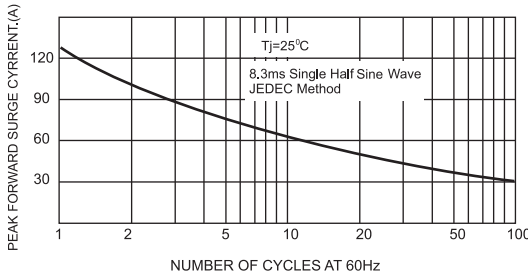


FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG

