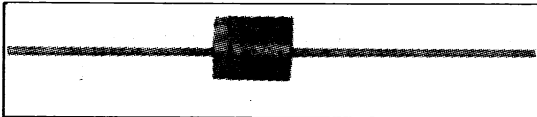




HER601G THRU HER608G

6.0 AMPS. GLASS PASSIVATED HIGH EFFICIENCY RECTIFIERS



VOLTAGE RANGE
50 to 1000 Volts
CURRENT
6.0 Amperes

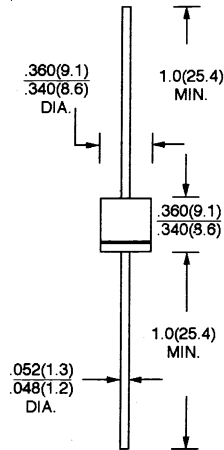
FEATURES

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

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any
- * Weight: 2.0 grams

P600



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

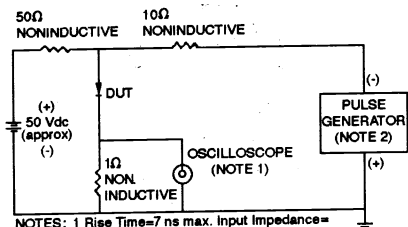
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	HER 601G	HER 602G	HER 603G	HER 604G	HER 605G	HER 606G	HER 607G	HER 608G	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 D. C Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V	
Maximum Average Forward Rectified Current .375" (9.5mm) lead length @ $T_A = 55^\circ\text{C}$ (Note 1)	$I_{F(AV)}$	6.0								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 at 6.0A (Note 1)	V_F	1.0			1.3		1.7			V	
Maximum D. C Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated D. C. Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_R					10.0		200			μA μA
Maximum Reverse Recovery Time (Note 2)	T_{RR}	60				75				nS	
Typical Junction Capacitance (Note 3)	C_J	100				70				pF	
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 150								°C	

- NOTES:** 1. Mounted on P. C. B with 1.1 × 1.1" (30 × 30mm) copper pads.
2. Reverse Recovery Test Conditions: $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$.
3. Measured at 1 MHz and applied reverse voltage of 4.0V D. C.

RATINGS AND CHARACTERISTIC CURVES (HER601G THRU HER608G)

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



NOTES: 1 Rise Time=7 ns max. Input Impedance=1 megohm 22pF
2 Rise Time=10ns max. Source Impedance=50 ohms

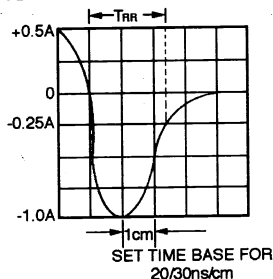


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

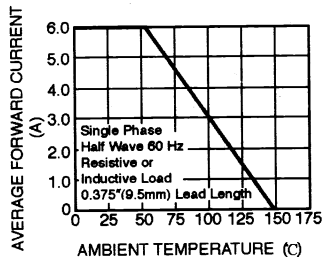


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

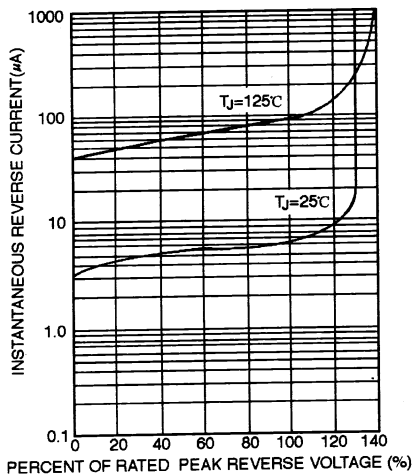


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

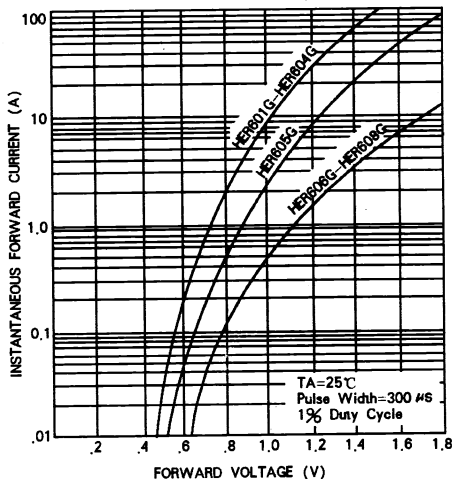


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

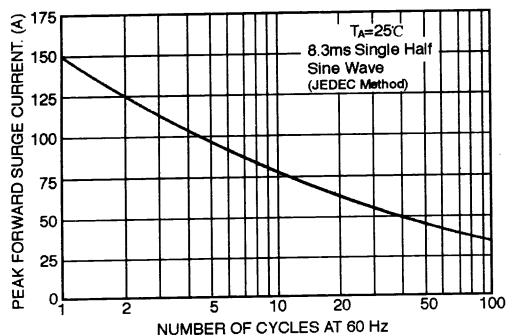


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

