



HER601 THRU HER608

6.0 AMPS. HIGH EFFICIENCY RECTIFIERS

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

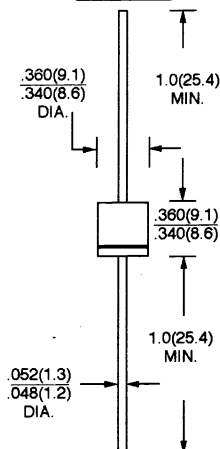
VOLTAGE RANGE

50 to 1000 Volts

CURRENT

6.0 Amperes

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 601	HER 602	HER 603	HER 604	HER 605	HER 606	HER 607	HER 608	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°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}	200								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°C at Rated D. C Blocking Voltage @ T _A = 100°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					65			pF
Operating Temperature Range	T _J	- 65 to + 125								°C
Storage Temperature Range	T _{STG}	- 65 to + 150								°C

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

RATINGS AND CHARACTERISTIC CURVES (HER601 THRU HER608)

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

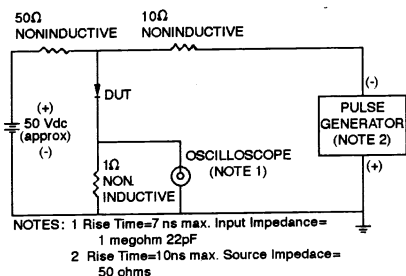


FIG. 2 – TYPICAL FORWARD CURRENT DERATING CURVE

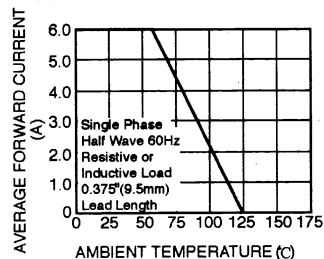


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

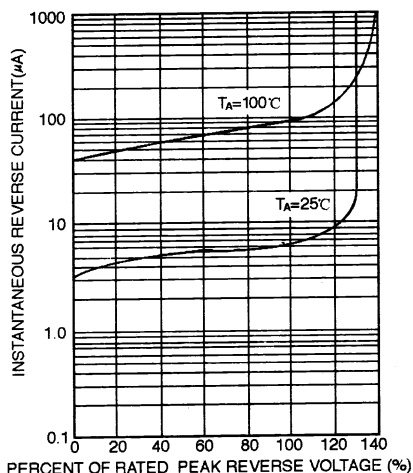


FIG. 4 – TYPICAL FORWARD CHARACTERISTICS

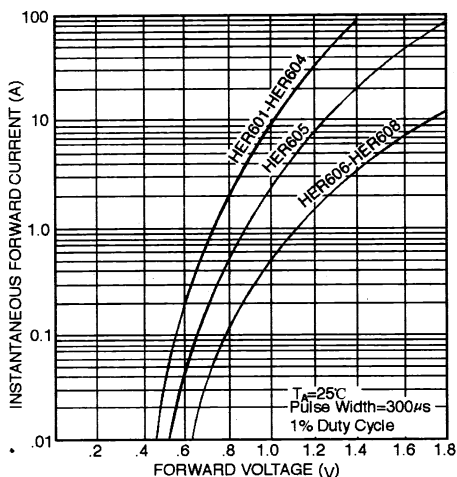


FIG. 5 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

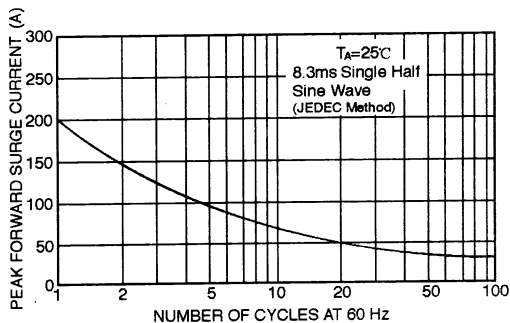


FIG. 6 – TYPICAL JUNCTION CAPACITANCE

