



HER101G THRU HER108G

HIGH EFFICIENCY GLASS PASSIVATED RECTIFIER

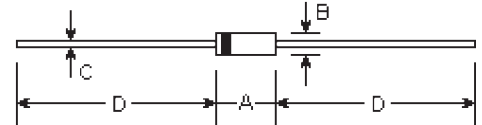
Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.0 Ampere

Features

- Low power loss, high efficiency
- Low leakage
- Low forward voltage
- High current capability
- High speed switching
- High surge capability
- High reliability

DO-41



Mechanical Data

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Lead:** MIL-STD-202E method 208C guaranteed
- **Mounting Position:** Any
- **Weight:** 0.012 ounce, 0.335 gram

DIMENSIONS					Note
DIM	inches		mm		
	Min.	Max.	Min.	Max.	
A	0.165	0.205	4.2	5.2	
B	0.079	0.106	2.0	2.7	Φ
C	0.028	0.034	0.71	0.86	Φ
D	1.000	-	25.40	-	

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	HER 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	HER 108G	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	300	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =50°C	I _(AV)	1.0								Amp
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I _{FSM}	30.0								Amps
Maximum instantaneous forward voltage at 1.0A DC	V _F	1.0			1.3		1.5	1.7		Volts
Maximum full load reverse current average, full cycle 0.375" (9.5mm) lead length at T _L =55°C	I _{R(AV)}	100.0								μ A
Maximum DC reverse current at rated DC blocking voltage T _A =25°C	I _R	5.0								μ A
Typical reverse recovery time (Note 1)	T _{rr}	50.0					75.0			nS
Typical junction capacitance (Note 2)	C _J	15					12			μ F
Operating and storage temperature range	T _J , T _{STG}	-65 to +150								°C

Notes:

(1) Test conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$

(2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES

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

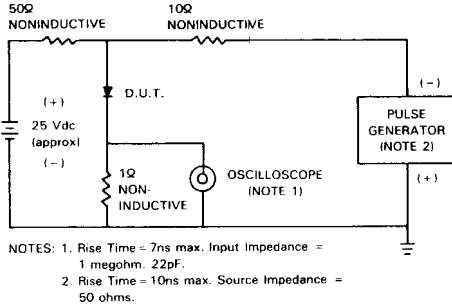


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

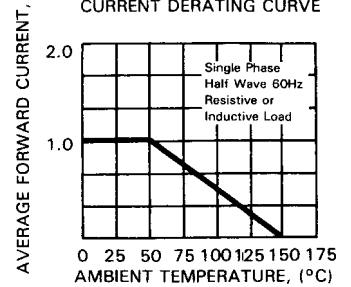


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

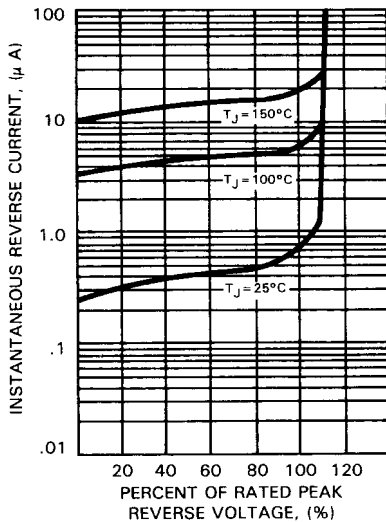


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

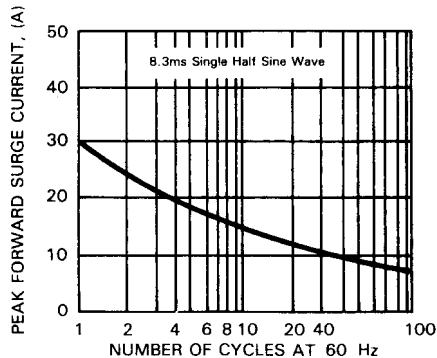


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

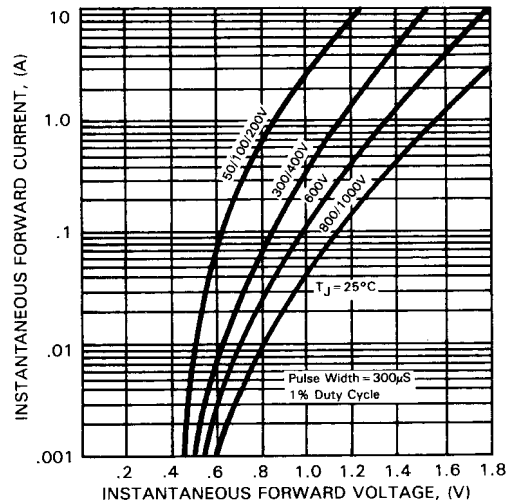


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

