

HER101 THRU HER108

HIGH EFFICIENCY RECTIFIER Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

Features

• Low power loss, high efficiency

Low leakage

Low forward voltage

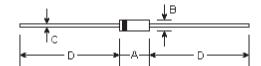
High current capability

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, 0.33 gram

DIMENSIONS										
DIM	inches		m	Note						
	Min.	Max.	Min.	Max.	Note					
Α	0.165	0.205	4.2	5.2						
В	0.079	0.106	2.0	2.7	ф					
С	0.028	0.034	0.71	0.86	ф					
D	1.000	-	25.40	-						

Maximum Ratings and Electrical Characteristics

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

For capacitive load, derate current by 20%.

	Symbols	HER 101	HER 102	HER 103	HER 104	HER 105	HER 106	HER 107	HER 108	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 $^{\circ}$ C $I_{(AV)}$					Amp					
eak forward surge current, 3mS single half sine-wave superimposed I n rated load (MIL-STD-750D 4066 method) I sm 30.0					Amps					
Maximum instantaneous forward voltage at 1.0A DC	V _F	1.0 1.3 1.5 1.7				.7	Volts			
Maximum full load reverse current average, full cycle 0.375" (9.5mm) lead length at $\rm T_{L}$ =55 $\rm ^{\circ}C$	I _{R(AV)}	100.0								μА
Maximum DC reverse current at rated DC blocking voltage ${\rm T_A=25^{\circ}C}$	I _R	5.0								μА
Maximum reverse recovery time (Note 1)	T _m	50 75						nS		
Typical junction capacitance (Note 2)	C _J	15 12							ρF	
Operating and storage temperature range	T _J , T _{STG}	-65 to +150							°C	

Notes:

- (1) Test conditions: I_F =0.5A, I_R =1.0A, I_{rr} =0.25A
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES

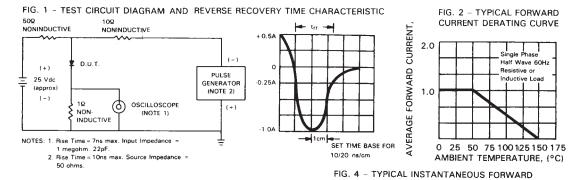
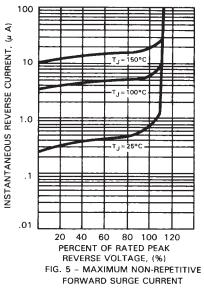
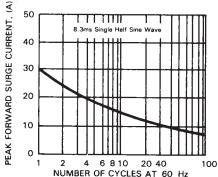


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS





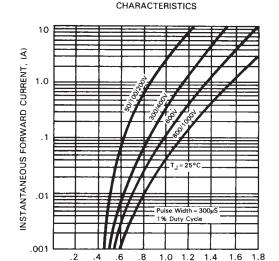


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

INSTANTANEOUS FORWARD VOLTAGE, (V)

