



HER101(L) THRU HER108(L)

1.0 AMP. 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: 0.34 grams (0.22grams A-405)

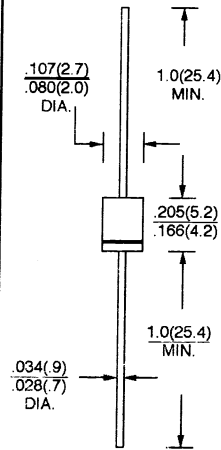
VOLTAGE RANGE

50 to 1000 Volts

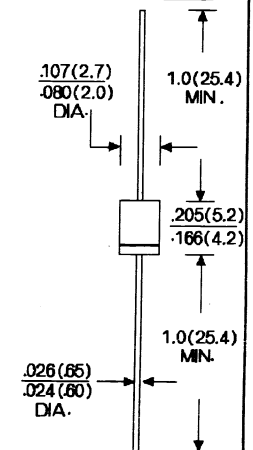
CURRENT

1.0 Ampere

DO-41



A-405



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.

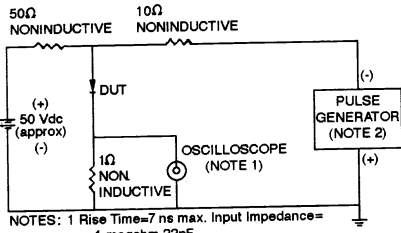
For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	HER 101(L)	HER 102(L)	HER 103(L)	HER 104(L)	HER 105(L)	HER 106(L)	HER 107(L)	HER 108(L)	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 @ $T_A = 55^\circ C$	$I_{F(AV)}$	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30								A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0		1.3		1.7			V	
Maximum D. C Reverse Current @ $T_A = 25^\circ C$ at Rated D. C Blocking Voltage @ $T_A = 100^\circ C$	I_R	5.0 100								μA μA
Maximum Reverse Recovery Time(Note 1)	T_{RR}	50				75				nS
Typical Junction Capacitance (Note 2)	C_J	20				15				pF
Operating Temperature Range	T_J	- 65 to + 125								$^\circ C$
Storage Temperature Range	T_{STG}	- 65 to + 150								$^\circ C$

- 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 4.0V D. C.

RATINGS AND CHARACTERISTIC CURVES (HER101(L) THRU HER108(L))

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

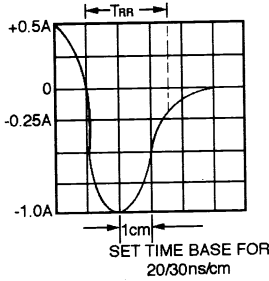


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

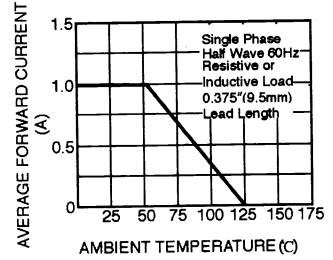


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

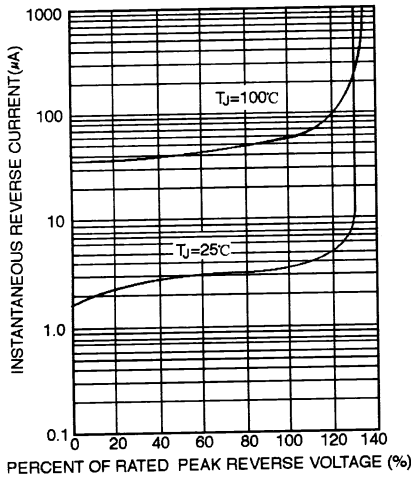


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

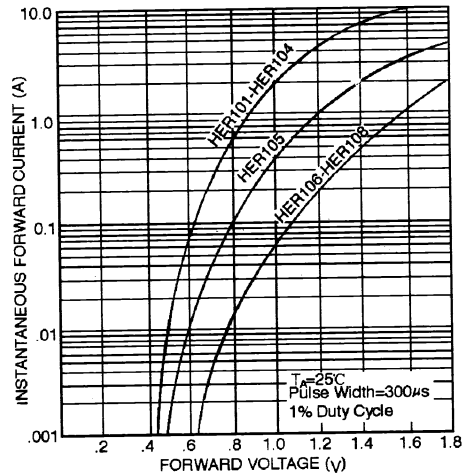


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

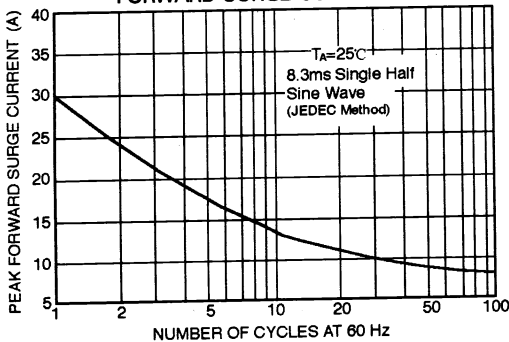


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

