

646-738 to 763

HER101 THRU HER107

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 DO-41
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * High temperature soldering guaranteed:
250°C/10 seconds/.375", (9.5mm) lead lengths
at 5 lbs., (2.3kg) tension
- * Weight: 0.34 grams

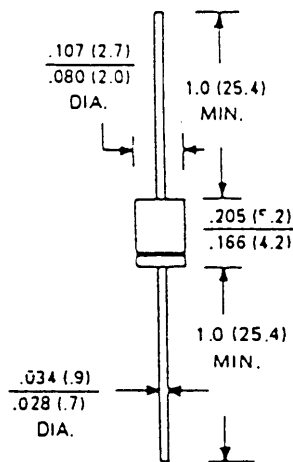
VOLTAGE RANGE

50 to 800 Volts

CURRENT

1.0 Ampere

DO-41



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	HER101	HER102	HER103	HER104	HER105	HER106	HER107	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	V
Maximum RMS Voltage	35	70	140	210	280	420	560	V
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	V
Maximum Average Forward Rectified Current .375" (9.5mm) lead length @ T _A =55°C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	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	5.0 100							μA μA
Maximum Reverse Recovery Time (Note 1)	50					75		nS
Typical Junction Capacitance (Note 2)	20					15		pF
Operating and Storage Temperature Range T _J , T _{STG}	-65 to +125					-65 to +150		°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.

multicomp

RATINGS AND CHARACTERISTIC CURVES (HER101 THRU HER107)

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

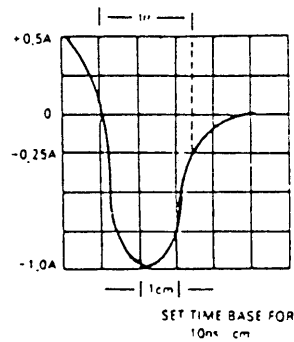
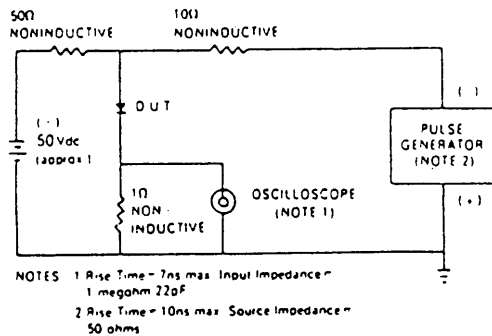


FIG. 2 - MAXIMUM AVERAGE FORWARD CURRENT RATING

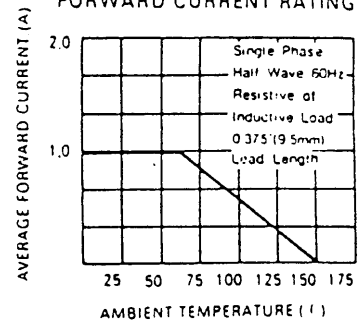


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

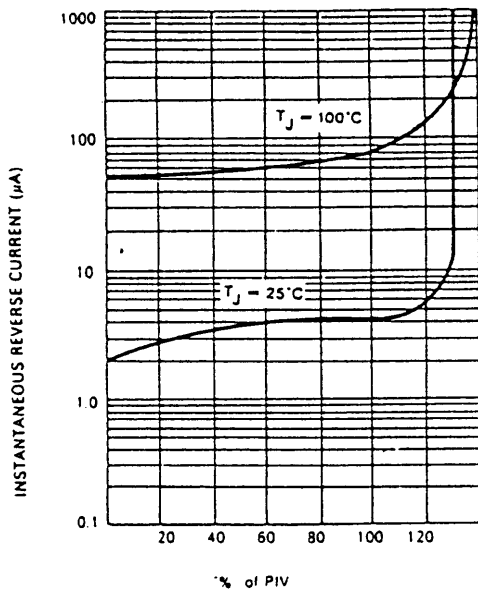


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

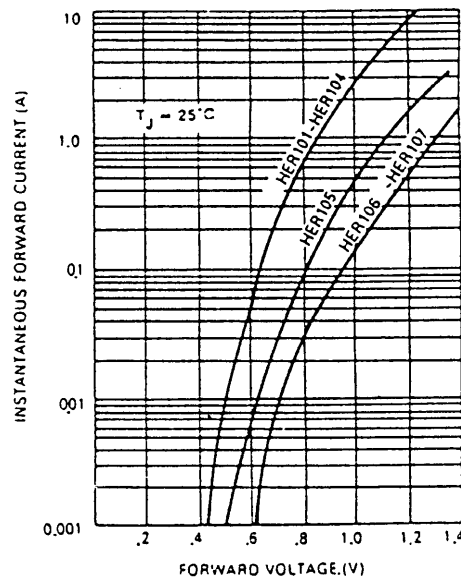


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

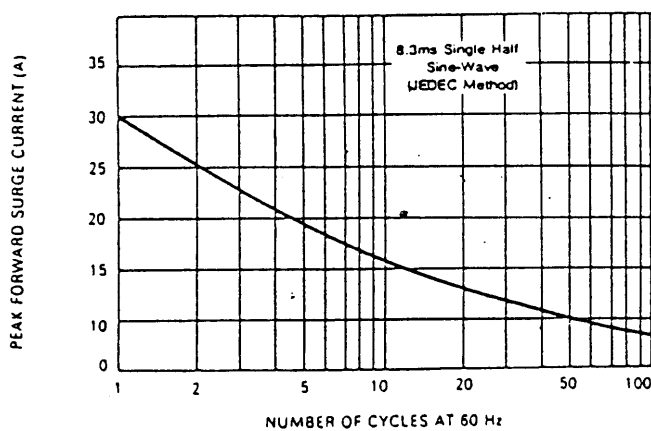


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

