

HER101/UF4001 THRU HER108/UF4007

1.0 AMP. HIGH EFFICIENT RECTIFIERS

Voltage Range
50 to 1000 VOLTS
Current
1.0 Amperes

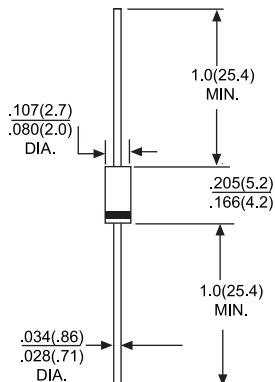
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Cases: Molded plastic DO-41
- Epoxy: UL 94V-O 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 gram

DO-41



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

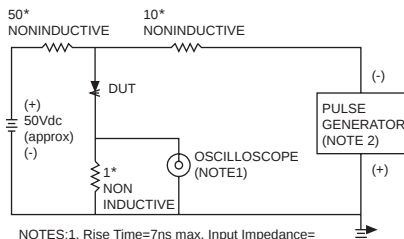
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number		HER101 UF4001	HER102 UF4002	HER103 UF4003	HER104	HER105 UF4004	HER106 UF4005	HER107 UF4006	HER108 UF4007	UNITS
Maximum Repetitive 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 DC 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	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 @1.0A	V _F	1.0				1.3	1.7			V
Maximun DC Reverse Current @ T _A = 25°C at Rated DC Blocking Voltage @ T _A = 100°C	I _R					5.0 100				uA uA
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	-55 to+125								°C
Storage Temperature Range	T _{STG}	-55 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 4.0 V D.C.

RATING AND CHARACTERISTIC CURVES HER101/UF4001 THRU HER108/UF4007

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



NOTES: 1. Rise Time=7ns max. Input Impedance=1 megohm 22pf
2. Rise Time=10ns max. Source Impedance=50 ohms

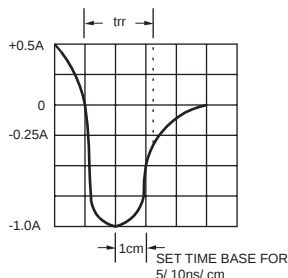


FIG.2-MAXIMUM AVERAGE FORWARD CURRENT DERATING

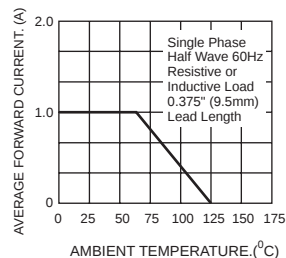


FIG.3-TYPICAL REVERSE CHARACTERISTICS

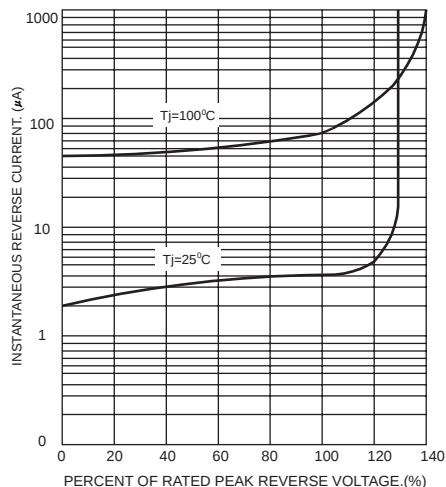


FIG.4-TYPICAL FORWARD CHARACTERISTICS

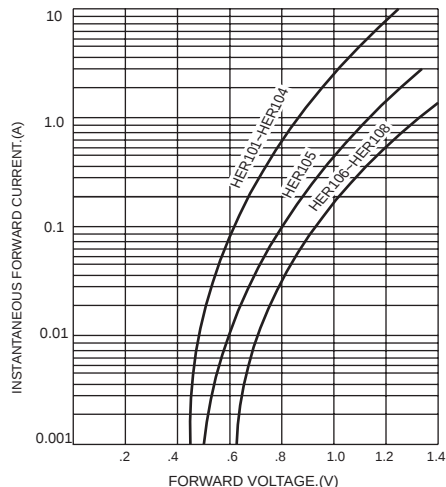


FIG.5-MAXIMUM NON-REPETITIVE SURGE CURRENT

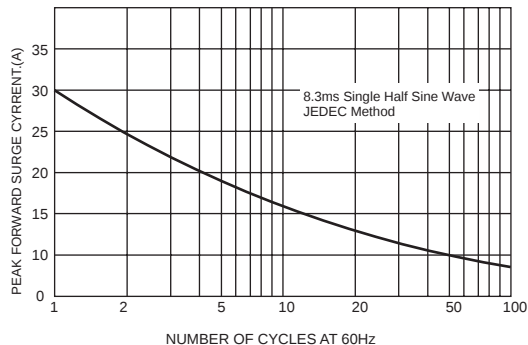


FIG.6-TYPICAL JUNCTION CHARACTERISTICS

