



# HER301/UF5400 THRU HER308/UF5408

**3.0 AMPS. HIGH EFFICIENT RECTIFIERS**

Voltage Range  
50 to 1000 Volts  
Current  
3.0 Amperes

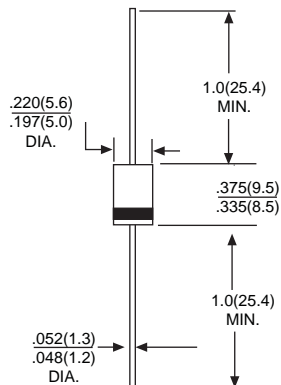
**Features**

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

**Mechanical Data**

- \*Cases:Molded plastic
- \*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:1.2 grams

**DO-201AD**



Dimensions in inches and (millimeters)

**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%

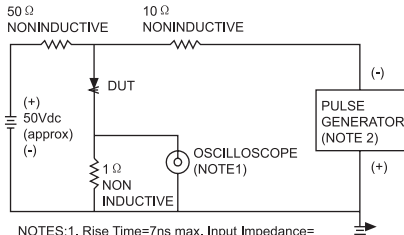
Type Number		HER301 UF5400	HER302 UF5401	HER303 UF5402	HER304 UF5403	HER305 UF5404	HER306 UF5406	HER307 UF5407	HER308 UF5408	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @T <sub>A</sub> = 55°C	I <sub>F(AV)</sub>	3.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	150								A
Maximum Instantaneous Forward Voltage @3.0A	V <sub>F</sub>	1.0			1.3		1.7			V
Maximun DC Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 100°C	I <sub>R</sub>	10.0 200								uA uA
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	50				75				nS
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	80				50				pF
Operating Temperature Range	T <sub>J</sub>	-55 to+125								°C
Storage Temperature Range	T <sub>STG</sub>	-55 to+150								°C

NOTES: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>RR</sub>=0.25A  
2.Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

# RATING AND CHARACTERISTIC CURVES HER301/UF5400 THRU HER308/UF5408



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

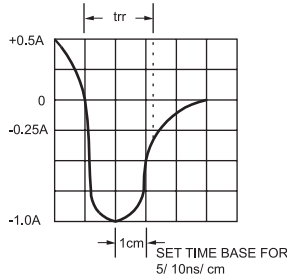


FIG.2-MAXIMUM AVERAGE FORWARD CURRENT DERATING

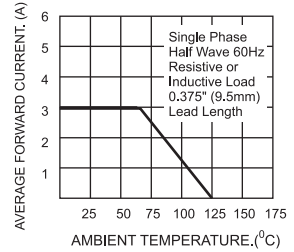


FIG.3-TYPICAL REVERSE CHARACTERISTICS

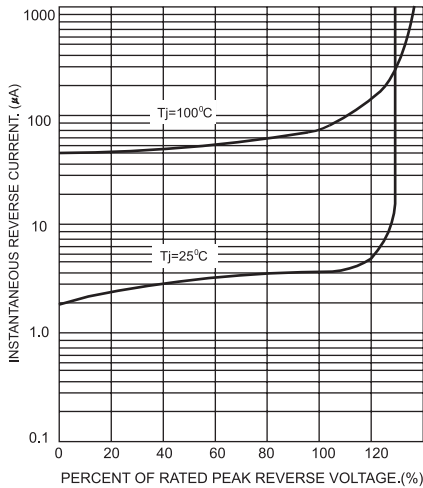


FIG.5-TYPICAL FORWARD CHARACTERISTICS

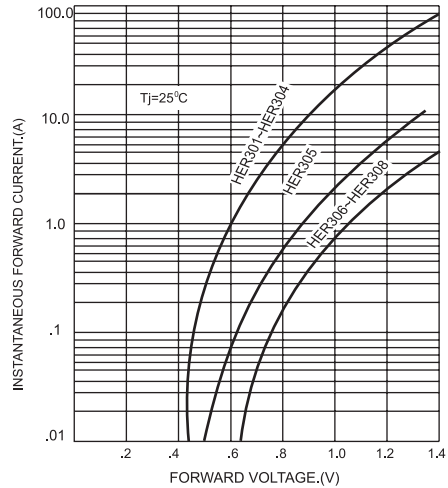


FIG.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

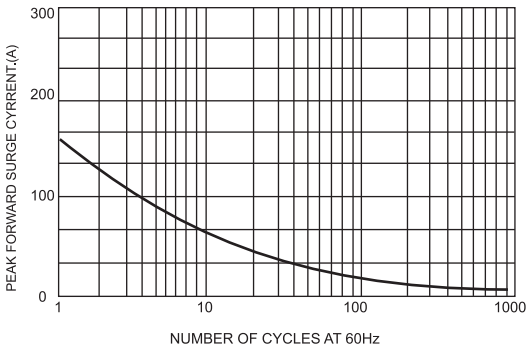


FIG.6-TYPICAL JUNCTION CHARACTERISTICS

