HER301/UF5400 THRU HER308/UF5408

3.0 AMPS. HIGH EFFICIENT RECTIFIERS

Voltage Range
50 to 1000 Volts
Current
3.0 Amperes

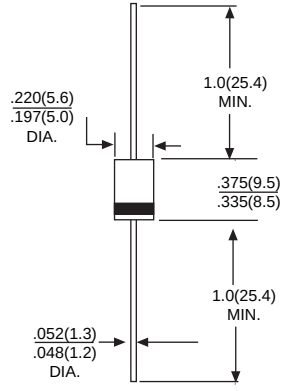
Features

*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

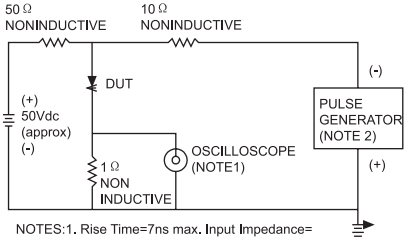
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

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_{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	$I_{F(AV)}$	3.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150								A
Maximum Instantaneous Forward Voltage @3.0A	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	10.0 200								uA uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	50					75			nS
Typical Junction Capacitance (Note 2)	C_J	80					50			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
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. Sourse Impedance= 50 ohms

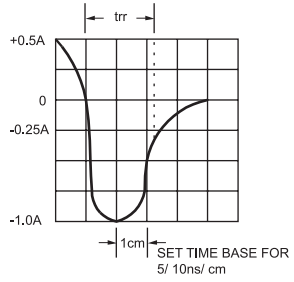


FIG.2-MAXIMUM AVERAGE FORWARD CURRENT DERATING

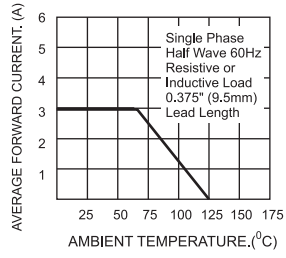


FIG.3-TYPICAL REVERSE CHARACTERISTICS

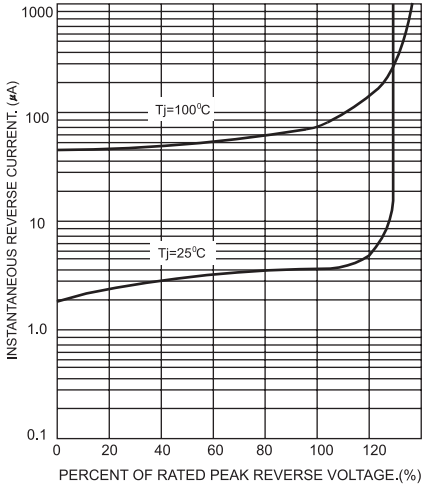


FIG.5-TYPICAL FORWARD CHARACTERISTICS

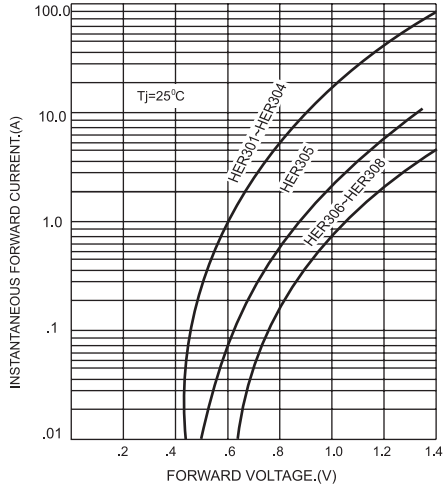


FIG.4-MAXIMUM NON-REPETITIVE SURGE CURRENT

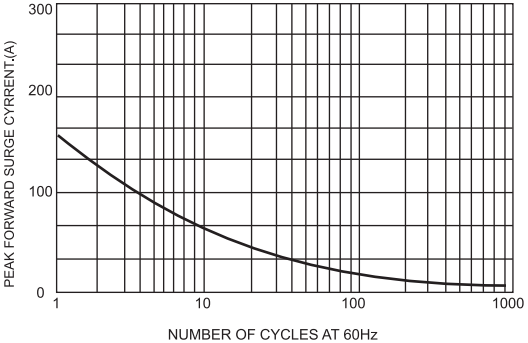


FIG.6-TYPICAL JUNCTION CHARACTERISTICS