



Changshu Talent  
Semiconductors Co.,Ltd  
Tel:0086-512-52851998  
Fax:0086-512-52153129

# HER101 THRU HER108

## Features

- High Surge Current Capability
- Low Forward Voltage Drop
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

Operating Temperature: -55°C to +125°C  
Storage Temperature: -55°C to +150°C  
For capacitive load, derate current by 20%

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HER101	HER101	50V	35V	50V
HER102	HER102	100V	70V	100V
HER103	HER103	200V	140V	200V
HER104	HER104	300V	210V	300V
HER105	HER105	400V	280V	400V
HER106	HER106	600V	420V	600V
HER107	HER107	800V	560V	800V
HER108	HER108	1000V	700V	1000V

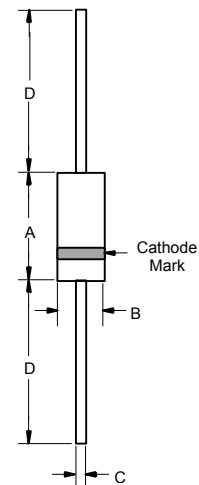
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0 A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V 1.3V 1.7V	$I_{FM} = 1.0\text{A};$ $T_A = 25^\circ\text{C}$
Reverse Current At Rated DC Blocking Voltage (Maximum DC)	$I_R$	5.0 A 100 A	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Maximum Reverse Recovery Time	$T_{rr}$	50ns 75ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$
Typical Junction Capacitance	$C_J$	20pF 15pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

## 1.0 Amp High Efficient Rectifiers 50 to 1000 Volts

### DO-41



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.166	.205	4.2	5.2	
B	.08	.107	2.0	2.7	
C	.028	.034	.71	.86	
D	1.000	---	25.40	---	

# HER101 THRU HER108



## RATINGS AND CHARACTERISTIC CURVES

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

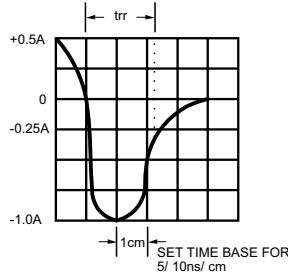
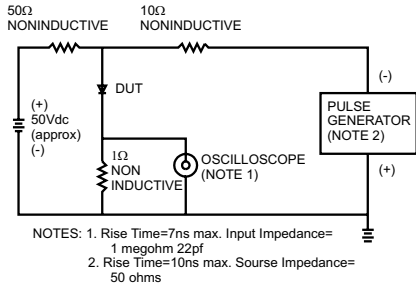


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

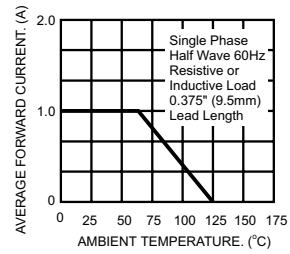


FIG.3- TYPICAL REVERSE CHARACTERISTICS

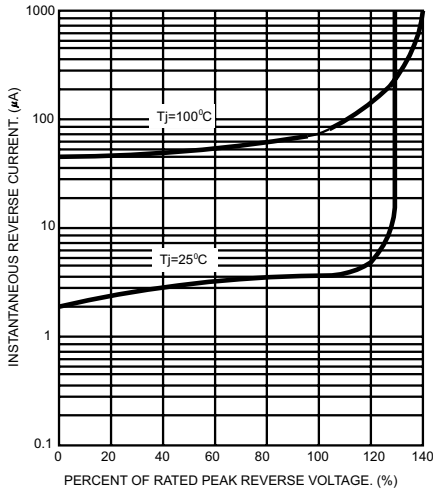


FIG.4- TYPICAL FORWARD CHARACTERISTICS

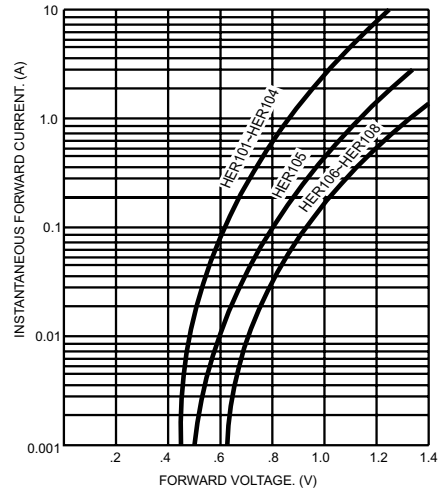


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

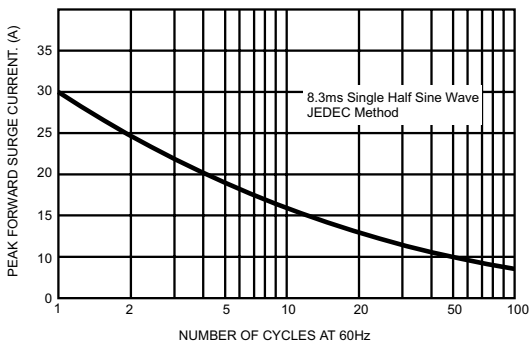


FIG.6- TYPICAL JUNCTION CAPACITANCE

