

# ER101 THRU ER108

## 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

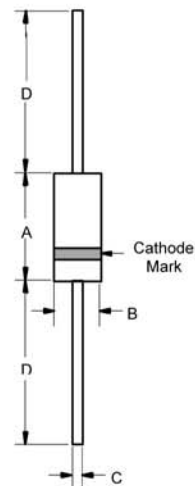
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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 HER101-104 HER105 HER106-108	$V_F$	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 $\mu\text{A}$ 100 $\mu\text{A}$	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Maximum Reverse Recovery Time HER101-105 HER106-108	$T_{rr}$	50ns 75ns	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$
Typical Junction Capacitance HER101-105 HER106-108	$C_J$	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**

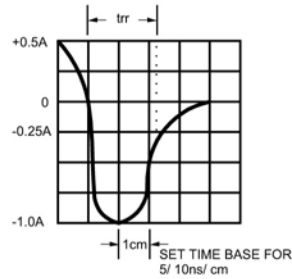
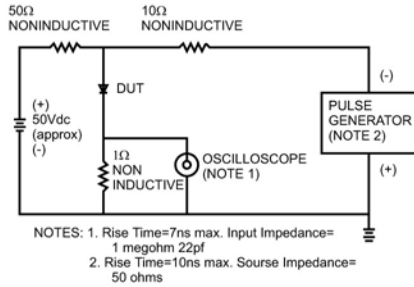
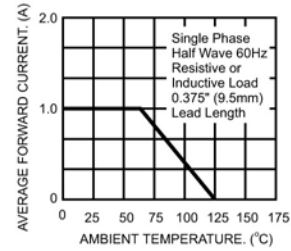
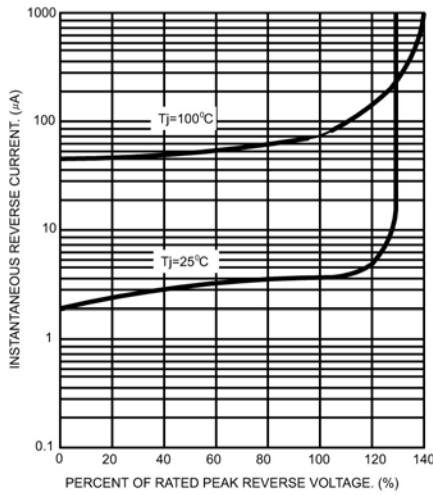
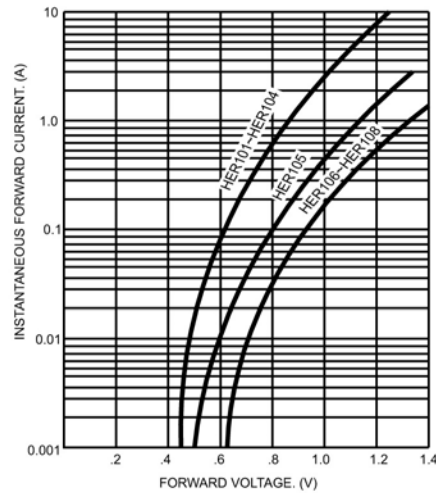
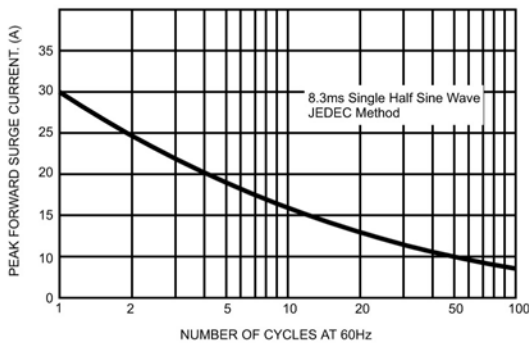
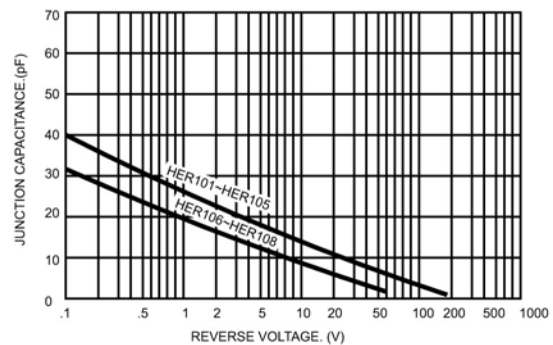
DO-41



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	---	

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## 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**


**Ordering Information :**

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

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