



Micro Commercial Components  
 21201 Itasca Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# HER101 THRU HER108

## Features

- High Surge Current Capability
- High Reliability
- Low Forward Voltage Drop
- High Current Capability

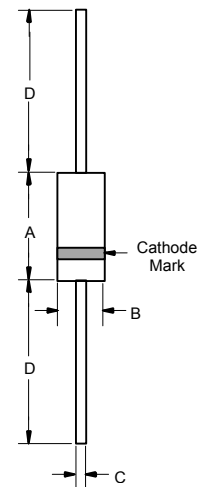
## Maximum Ratings

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

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

**1.0 Amp High  
 Efficient Rectifiers  
 50 to 1000 Volts**

## DO-41



## 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	$V_F$	HER101-104: 1.0V HER105: 1.3V HER106-108: 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	$T_{rr}$	HER101-105: 50ns HER106-108: 75ns	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$
Typical Junction Capacitance	$C_J$	HER101-105: 20pF HER106-108: 15pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

Notes: 1. 300 us Pulse Width, 1% Duty Cycle.

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	MIN .166	MAX .205	MIN 4.2	MAX 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

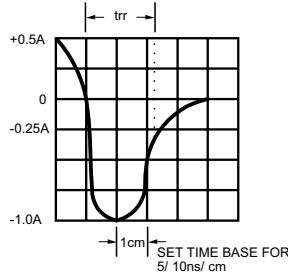
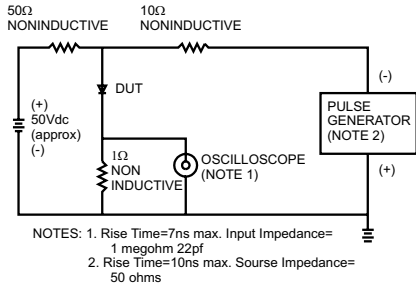


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

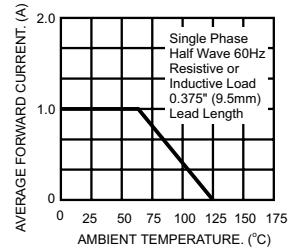


FIG.3- TYPICAL REVERSE CHARACTERISTICS

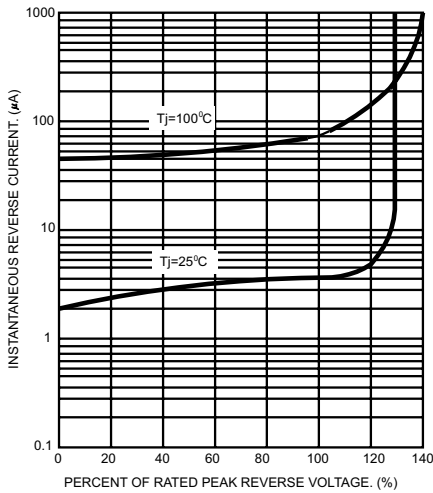


FIG.4- TYPICAL FORWARD CHARACTERISTICS

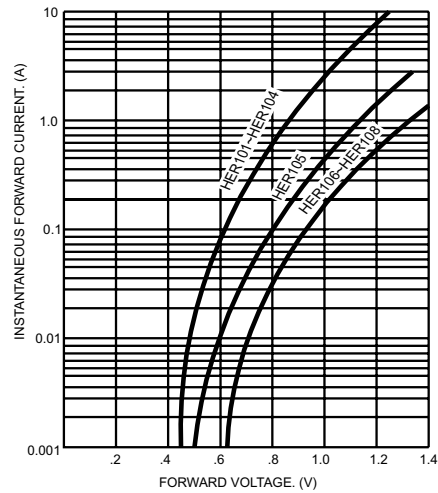


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

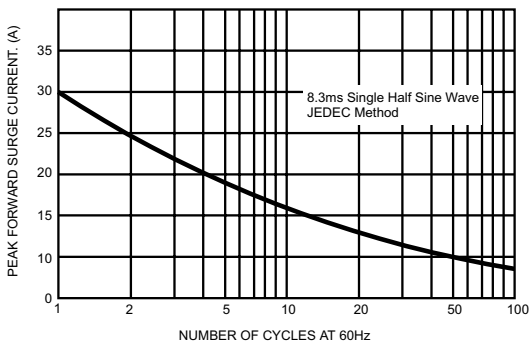


FIG.6- TYPICAL JUNCTION CAPACITANCE

