

# HER601 THRU HER608

## Features

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

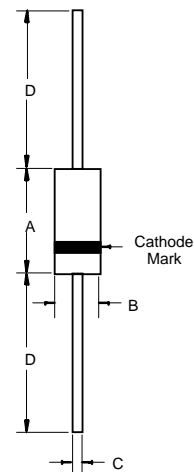
**6.0 Amp High  
Efficient Rectifiers  
50 to 1000 Volts**

## Maximum Ratings

Operating Temperature: -55 C to +150 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
HER601	---	50V	35V	50V
HER602	---	100V	70V	100V
HER603	---	200V	140V	200V
HER604	---	300V	210V	300V
HER605	---	400V	280V	400V
HER606	---	600V	420V	600V
HER607	---	800V	560V	800V
HER608	---	1000V	700V	1000V

R-6



## Electrical Characteristics @ 25 C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	6 A	$T_A = 55\text{ C}$
Peak Forward Surge Current	$I_{FSM}$	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage HER601-604 HER605 HER606-608	$V_F$	1.1V 1.3V 1.7V	$I_{FM} = 6.0A$ ; $T_A = 25\text{ C}$
Reverse Current At Rated DC Blocking Voltage (Maximum DC)	$I_R$	10 A 200 A	$T_A = 25\text{ C}$ $T_A = 100\text{ C}$
Maximum Reverse Recovery Time HER601-605 HER606-608	$T_{rr}$	50ns 75ns	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance HER601-605 HER606-608	$C_J$	100pF 65pF	Measured at 1.0MHz, $V_R=4.0V$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.340	.360	8.60	9.10	
B	.340	.360	8.60	9.10	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

\*Pulse Test: Pulse Width 300 sec, Duty Cycle 1%

# HER601 thru HER608



## RATINGS AND CHARACTERISTIC CURVES

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

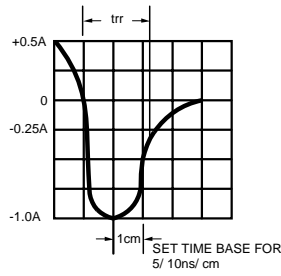
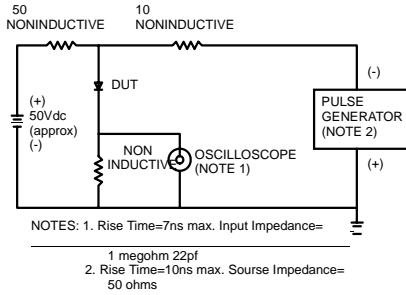


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

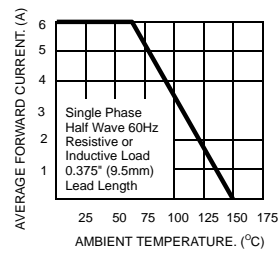


FIG.3- TYPICAL REVERSE CHARACTERISTICS

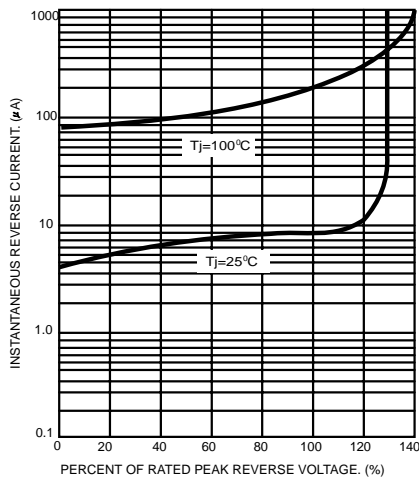


FIG.5- TYPICAL FORWARD CHARACTERISTICS

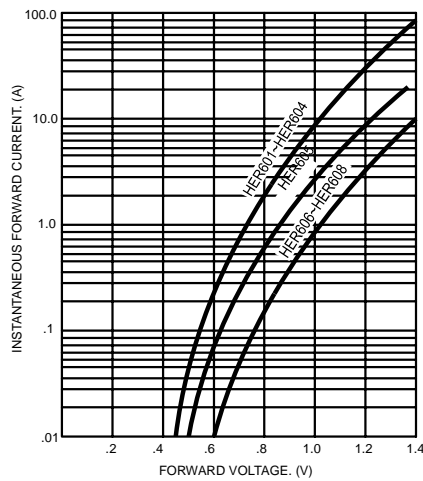


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

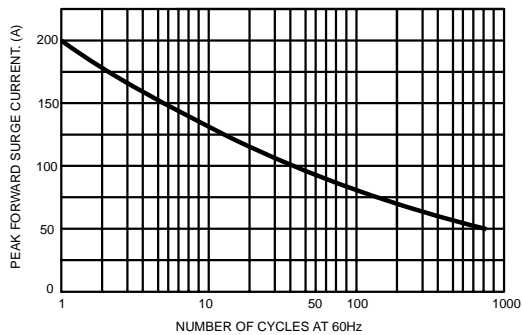


FIG.6- TYPICAL JUNCTION CAPACITANCE

