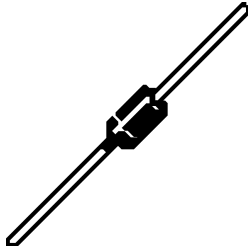




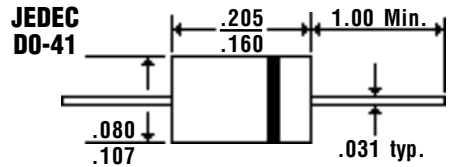
# 1.0 Amp Glass Passivated SUPER FAST PLASTIC RECTIFIERS

**HER101G . . . 108G Series**

## Description



## Mechanical Dimensions



## Features

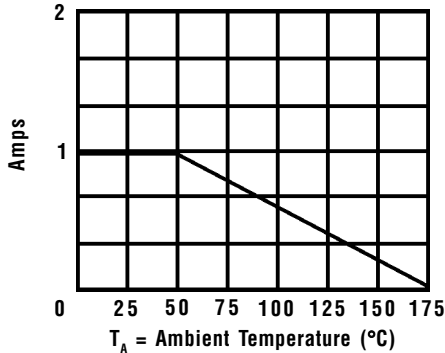
- GLASS PASSIVATED DIE
- ULTRAFAST RECOVERY TIME
- LOW FORWARD VOLTAGE DROP
- MEETS UL SPECIFICATION 94V-0

Electrical Characteristics @ 25°C.	<b>HER101G . . . 108G Series</b>								Units	
<b>Maximum Ratings</b>	<b>101G</b>	<b>102G</b>	<b>103G</b>	<b>104G</b>	<b>105G</b>	<b>106G</b>	<b>107G</b>	<b>108G</b>		
Peak Repetitive Reverse Voltage... $V_{RRM}$	50	100	200	300	400	600	800	1000	Volts	
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	210	280	420	560	700	Volts	
DC Blocking Voltage... $V_{DC}$	50	100	200	300	400	600	800	1000	Volts	
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ\text{C}$	..... 1.0 .....								Amps	
Non-Repetitive Peak Forward Surge Current... $I_{FSM}$ @ Rated Current & Temp	..... 30 .....								Amps	
Forward Voltage @ 1.0A... $V_F$	< ..... 1.0 ..... > 1.3 < ..... 1.7 ..... >								Volts	
DC Reverse Current... $I_R$ @ Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$				$T_A = 100^\circ\text{C}$				..... 5.0 .....	μAmps
	..... 150 .....				.....				μAmps	
Typical Junction Capacitance... $C_j$ (Note 1)	< ..... 35 ..... > < ..... 80 ..... >								pF	
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)	..... 2.5 .....								°C / W	
Typical Reverse Recovery Time... $t_{RR}$ (Note 3)	< ..... 50 ..... > < ..... 75 ..... >								nS	
Operating & Storage Temperature Range... $T_J, T_{STRG}$	..... -55 to 175 .....								°C	

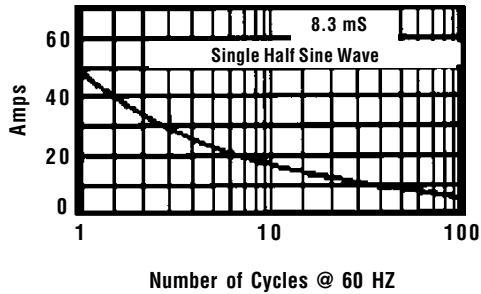
# 1.0 Amp Glass Passivated SUPER FAST PLASTIC RECTIFIERS

**HER101G . . . 108G Series**

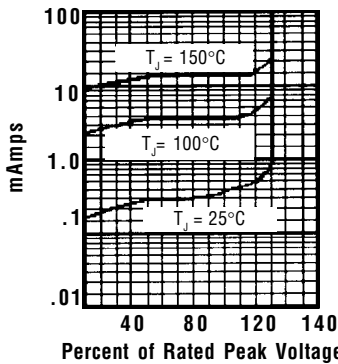
**Forward Current Derating Curve**



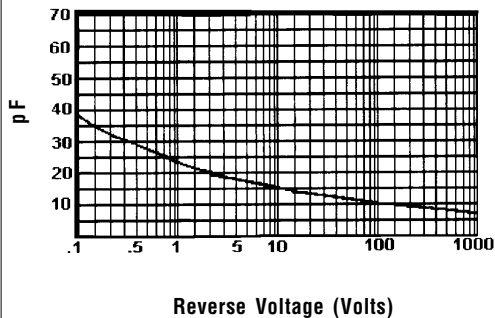
**Non-Repetitive Peak Forward Surge Current**



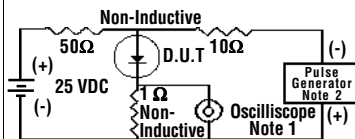
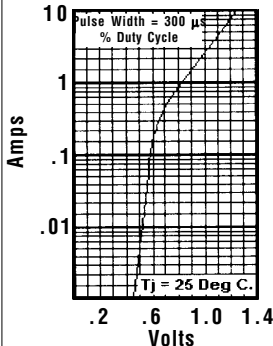
**Typical Reverse Characteristics**



**Typical Junction Capacitance**



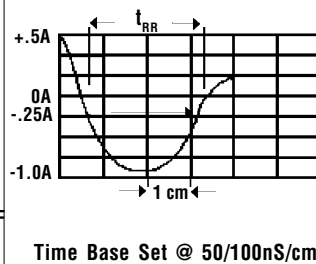
**Typical Instantaneous Forward Characteristics**



Notes:

1. Rise Time = 7 nS Max.  
Impedance = 1 megohm, 22 pF
2. Rise Time = 10 nS Max.  
Source Impedance = 50 Ohms

**Reverse Recovery Characteristics**



Ratings at 25 Deg. C ambient temperature unless otherwise specified.

Single Phase Half Wave, 60 HZ Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

- NOTES:**
1. Measured @ 1 MHz and applied reverse voltage of 4.0V.
  2. Thermal Resistance Junction to Ambient Vert. PC Board Mounting 0.5" (12.7mm) Lead Length.
  3. Conditions:  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$ .