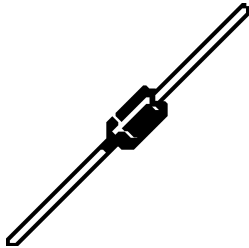
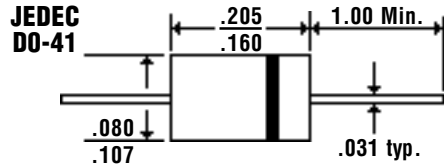


Description



Mechanical Dimensions

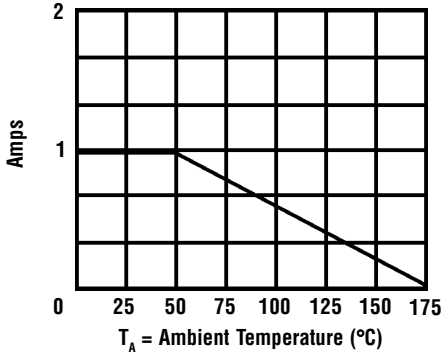


Features

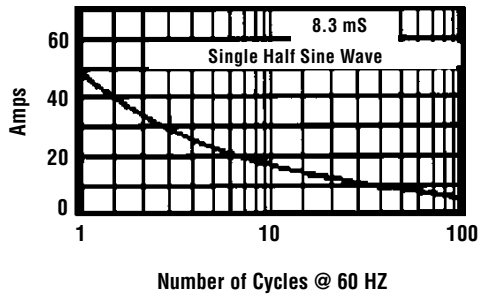
- **LOW COST**
- **LOW FORWARD VOLTAGE DROP**
- **ULTRAFAST RECOVERY TIME**
- **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.	<i>HER101 ... 107 Series</i>								Units	
Maximum Ratings	HER101	HER102	HER103	HER104	HER105	HER106	HER107			
Peak Repetitive Reverse Voltage... V_{RRM}	50	100	200	300	400	600	800	Volts		
RMS Reverse Voltage... $V_{R(rms)}$	35	70	140	210	280	420	560	Volts		
DC Blocking Voltage... V_{DC}	50	100	200	300	400	600	800	Volts		
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ C$				1.0				Amps		
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Current & Temp				30				Amps		
Forward Voltage @ 1.0A... V_F	<		1.0	>		<		1.4	>	Volts
DC Reverse Current... I_R @ Rated DC Blocking Voltage				5.0				μ Amps		
				150				μ Amps		
Typical Junction Capacitance... C_J (Note 1)	<		35	>		<		80	>	pF
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)				2.5				$^\circ C / W$		
Typical Reverse Recovery Time... t_{RR} (Note 3)				50				nS		
Operating & Storage Temperature Range... T_J, T_{STRG}				-65 to 150				$^\circ C$		

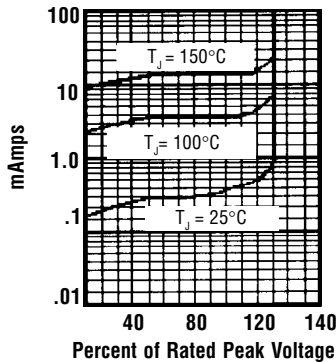
Forward Current Derating Curve



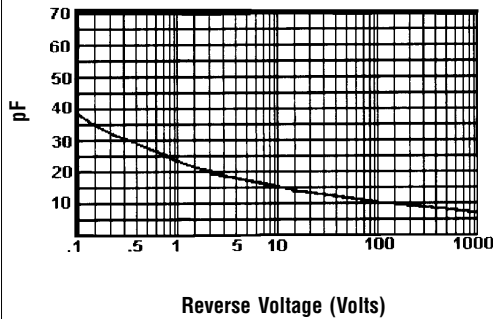
Non-Repetitive Peak Forward Surge Current



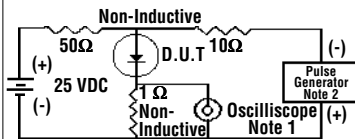
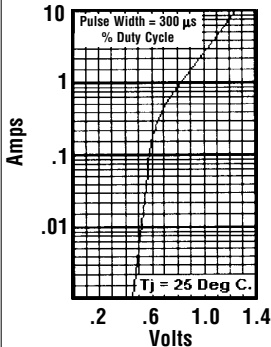
Typical Reverse Characteristics



Typical Junction Capacitance



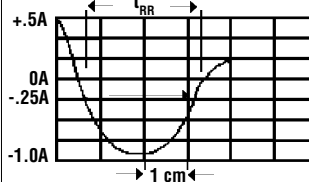
Typical Instantaneous Forward Characteristics



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



Time Base Set @ 50/100nS/cm

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: $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$.