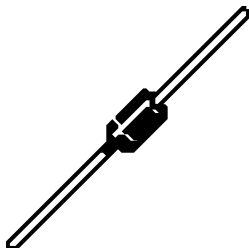
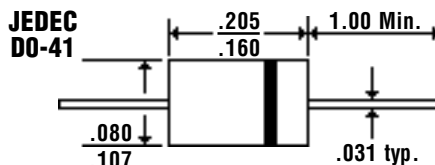


Description



Mechanical Dimensions

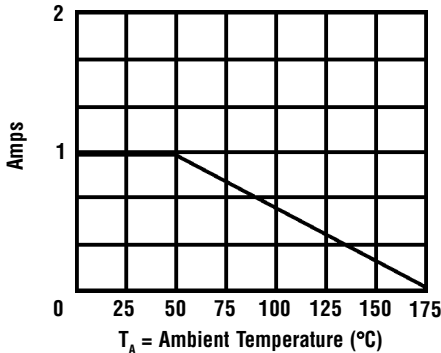


Features

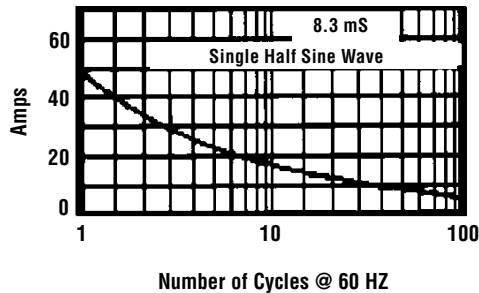
- **LOW COST**
- **LOW FORWARD VOLTAGE DROP**
- **ULTRAFAST RECOVERY TIME**
- **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.		HER101 ... 107 Series							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... $I_{F(av)}$	$T_A = 55^\circ\text{C}$	1.0							Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM}	@ Rated Current & Temp	30							Amps
Forward Voltage @ 1.0A... V_F		< 1.0 >							Volts
DC Reverse Current... I_R	$T_A = 25^\circ\text{C}$	5.0							μAmps
@ Rated DC Blocking Voltage	$T_A = 100^\circ\text{C}$	150							μAmps
Typical Junction Capacitance... C_J (Note 1)		< 35 >							pF
Typical Thermal Resistance... $R_{\theta JC}$ (Note 2)		2.5							$^\circ\text{C} / \text{W}$
Typical Reverse Recovery Time... t_{RR} (Note 3)		50							nS
Operating & Storage Temperature Range... T_J, T_{STRG}		-65 to 150							$^\circ\text{C}$

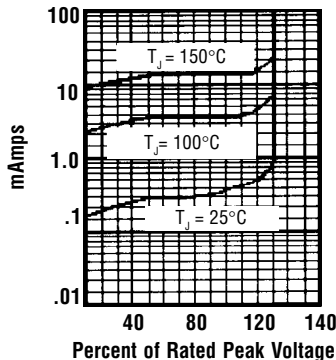
Forward Current Derating Curve



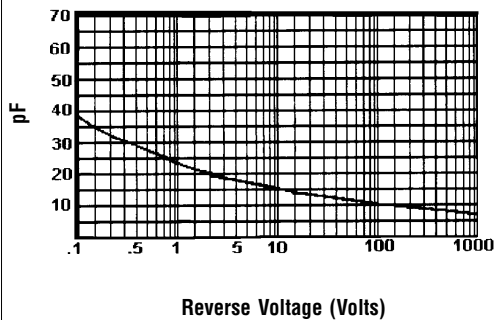
**Non-Repetitive
Peak Forward Surge Current**



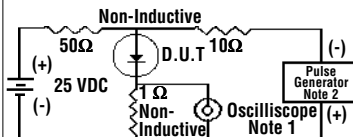
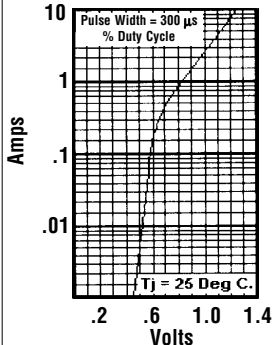
Typical Reverse Characteristics



Typical Junction Capacitance



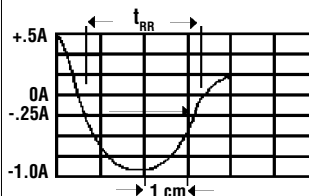
**Typical Instantaneous
Forward Characteristics**



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**



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