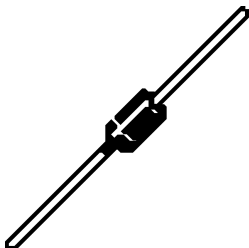
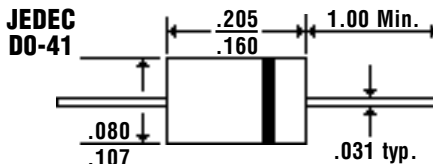


Description



Mechanical Dimensions

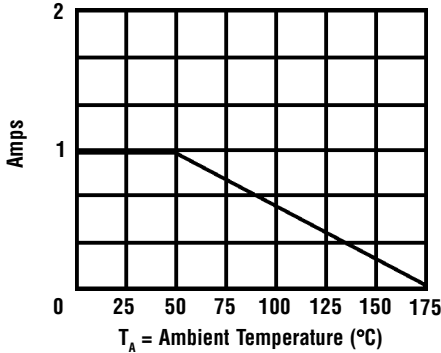


Features

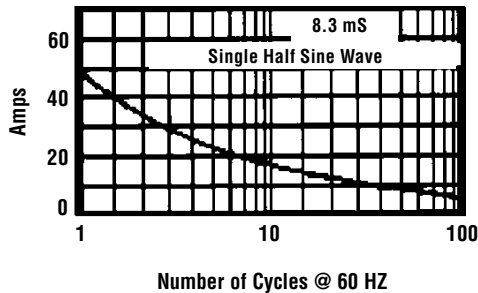
- **LOW COST**
 - **LOW FORWARD VOLTAGE DROP**
- **ULTRAFAST RECOVERY TIME**
 - **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.	<i>HER101 . . . 108 Series</i>								Units
Maximum Ratings	101	102	103	104	105	106	107	108	
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... $I_{F(av)}$ $T_A = 55^\circ C$					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					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 >					< 75 >			nS
Operating & Storage Temperature Range... T_J, T_{STRG}	-65 to 150								$^\circ C$

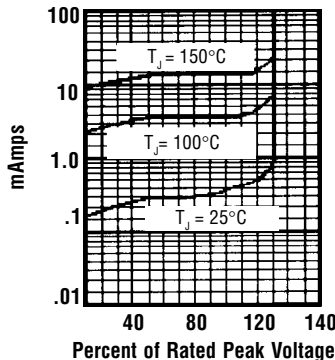
Forward Current Derating Curve



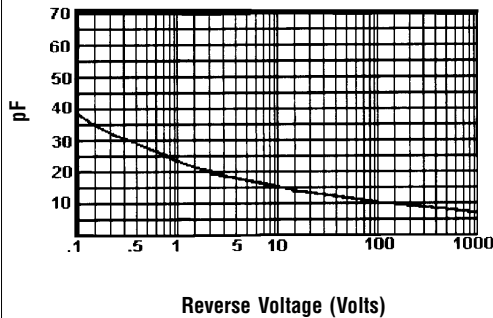
Non-Repetitive Peak Forward Surge Current



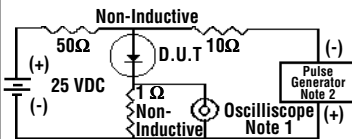
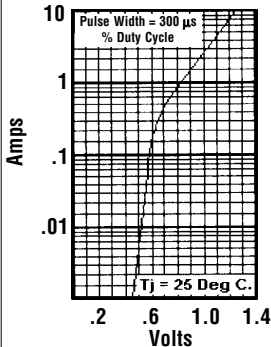
Typical Reverse Characteristics



Typical Junction Capacitance



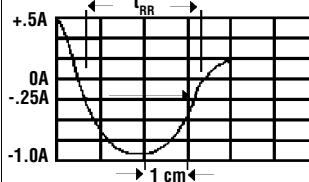
Typical Instantaneous Forward Characteristics



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