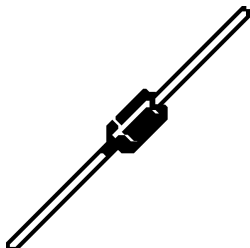
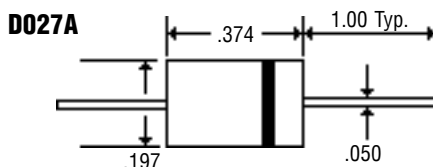


Description



Mechanical Dimensions

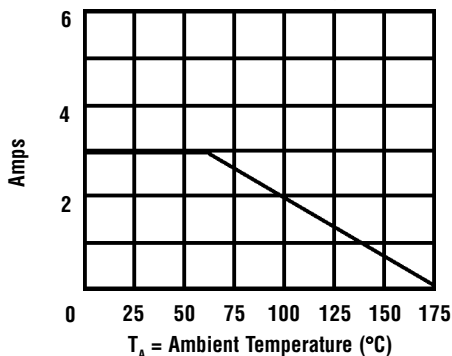


Features

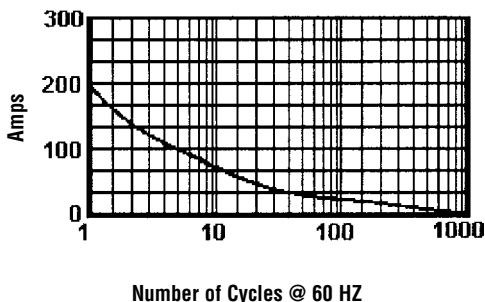
- **LOW COST**
- **LOW LEAKAGE**
- **HIGH SURGE CAPABILITY**
- **MEETS UL SPECIFICATION 94V-0**

Electrical Characteristics @ 25°C.		HER301 . . . 305 Series					Units
Maximum Ratings		HER301	HER302	HER303	HER304	HER305	
Peak Repetitive Reverse Voltage... V_{RRM}		50	100	200	300	400	Volts
RMS Reverse Voltage... $V_{R(rms)}$		35	70	140	210	280	Volts
DC Blocking Voltage... V_{DC}		50	100	200	300	400	Volts
Average Forward Rectified Current... $I_{F(av)}$ $T_A = 55^\circ\text{C}$		3.0					Amps
Non-Repetitive Peak Forward Surge Current... I_{FSM} @ Rated Current & Temp		150					Amps
Forward Voltage @ 3.0A... V_F		1.0					Volts
DC Reverse Current... I_R @ Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	10					μAmps
	$T_A = 100^\circ\text{C}$	200					μAmps
Typical Junction Capacitance... C_J		80					pF
Typical Thermal Resistance... $R_{\theta JC}$ (Note 1)		1.0					$^\circ\text{C} / \text{W}$
Typical Reverse Recovery Time... t_{RR} (Note 2)		50					nS
Operating & Storage Temperature Range... T_J, T_{STRG}		-65 to 150					$^\circ\text{C}$

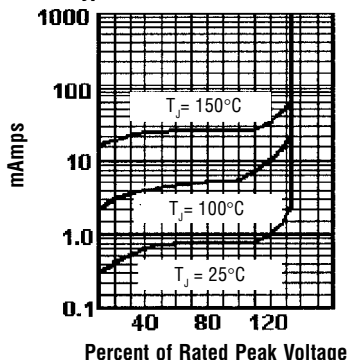
Forward Current Derating Curve



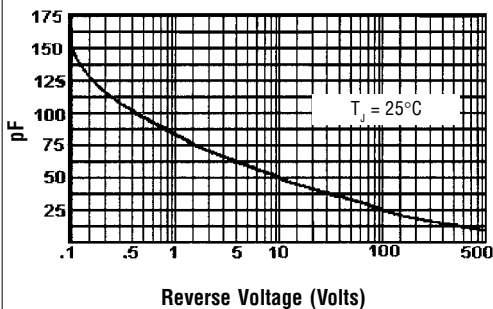
Non-Repetitive Peak Forward Surge Current



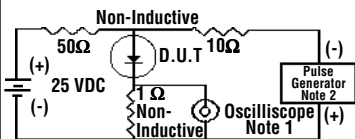
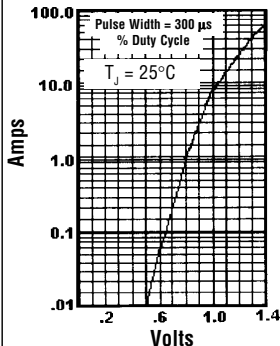
Typical Reverse Characteristics



Typical Junction Capacitance



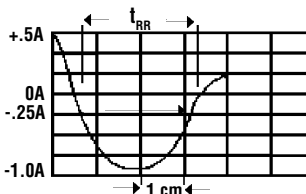
Typical Instantaneous Forward Characteristics



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



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