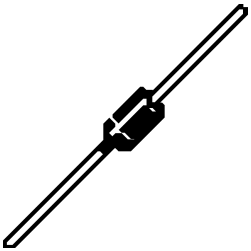
Data Sheet

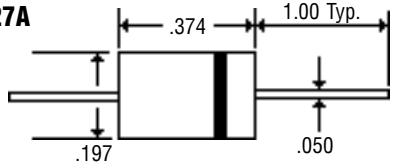
3.0 Amp SUPER FAST PLASTIC RECTIFIERS

HER301 . . . 305 Series

Description



Mechanical Dimensions



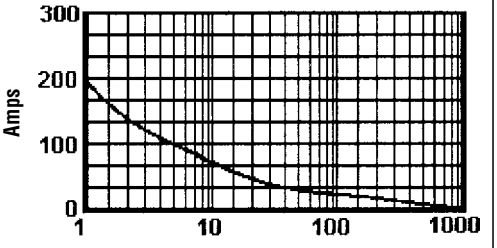
Features

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

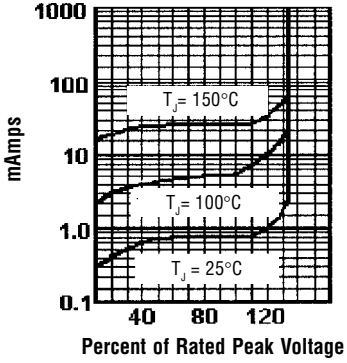
Electrical Characteristics @ 25°C.	***HER301 . . . 305 Series***					**Units**
Maximum Ratings	**HER301**	**HER302**	**HER303**	**HER304**	**HER305**	
Peak Repetitive Reverse Voltage...V_{RRM}	50	100	200	300	400	Volts
RMS Reverse Voltage...$V_{R(rms)}$	35	70	140	210	280	Volts
DC Blocking Voltage...V_{DC}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

Forward Current Derating Curve

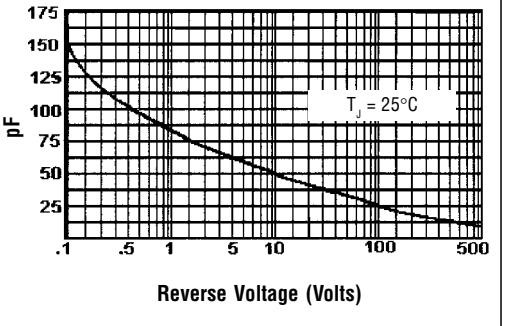
Non-Repetitive Peak Forward Surge Current



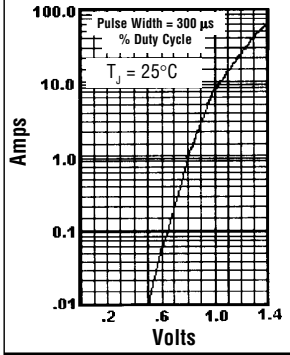
Typical Reverse Characteristics

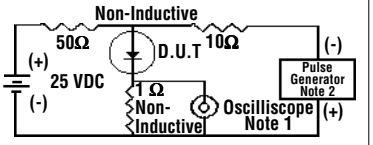


Typical Junction Capacitance



Typical Instantaneous Forward Characteristics

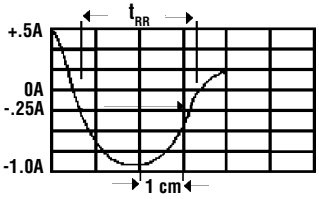




Notes:

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

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.

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%.