

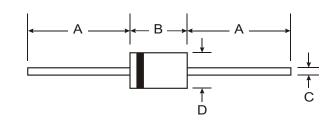
HER301 - HER305

3.0A HIGH EFFICIENCY RECTIFIER

Features

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Low Power Loss, High Efficiency Low Leakage Low Forward Voltage Drop High Current Capability High Speed Switching High Surge Current Rating Plastic Material - UL Flammability Classification 94V-0



Mechanical Data

Case: Molded Plastic

Terminals: Plated Axial Leads, Solderable per

MIL-STD-202, Method 208

Polarity: Color Band Denotes Cathode

Approx. Weight: 1.2 grams

DO-201AD						
Dim	Min	Max				
Α	25.4	_				
В	_	9.5				
С	1.2	1.3				
D	4.8	5.2				
All Dimensions in mm						

Maximum Ratings and Electrical Characteristics

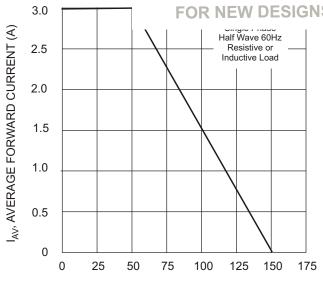
Ratings at 25° C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

Characteristic	Symbol	HER301	HER302	HER303	HER304	HER305	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	V
Maximum DC Blocking voltage	V _{DC}	50	100	200	300	400	V
Maximum Average Forward Rectified Current 9.5mm Lead Length @ T _A =50°C	I _(AV)	J _(AV) 3.0				А	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FM}	125				А	
Maximum Instantaneous Forward Voltage at 3.0 A DC		1.1					V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25$ °C		10					μА
		150					μА
Maximum Reverse Recovery Time (Note 1)		50					nS
Typical Junction Capacitance (Note 2)		70					pF
Operating and Storage Temperature Range		-65 to +150					°C

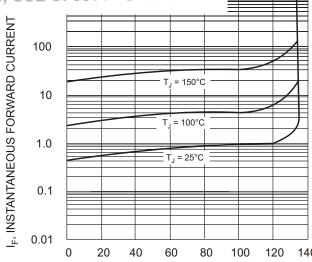
Notes:

- 1. Reverse Recovery Test Conditions: I_F =0.5 A, I_R =1.0 A, I_{RR} =0.25A
- 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

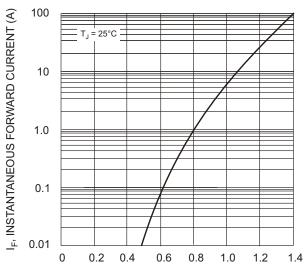
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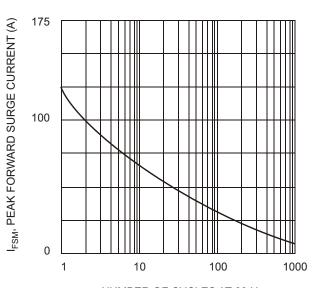
T_A, AMBIENT TEMPERATURE (°C) Fig. 1, Typical Forward Current Derating Curve



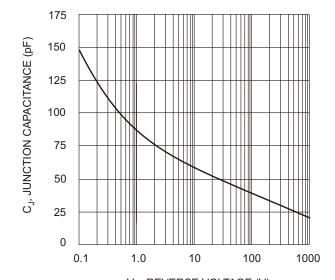
PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 2, Typical Reverse Characteristics



V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 3, Typ. Instantaneous Forward Characteristics



NUMBER OF CYCLES AT 60 Hz Fig. 4, Max. Non-Repetitive Peak Forward Surge Current



 V_R , REVERSE VOLTAGE (V) Fig. 5, Typical Junction Capacitance



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