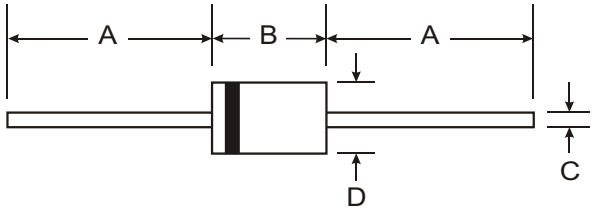
HER301 - HER305

3.0A HIGH EFFICIENCY RECTIFIER

DISCONTINUED NOT RECOMMENDED
FOR NEW DESIGNS, USE UF3001 - UF3007

Features

- 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



DO-201AD		
Dim	**Min**	**Max**
A	25.4	—
B	—	9.5
C	1.2	1.3
D	4.8	5.2
All Dimensions in mm		

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

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	$I_{(AV)}$	3.0					A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FM}	125					A
Maximum Instantaneous Forward Voltage at 3.0 A DC	V_F	1.1					V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T_A = 25°C	I_R	10					μA
Maximum Full Load Reverse Current Full Cycle Average 9.5mm Lead Length @ T_C = 55°C	I_R	150					μA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	50					nS
Typical Junction Capacitance (Note 2)	C_J	70					pF
Operating and Storage Temperature Range	T_J, T_{STG}	-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.

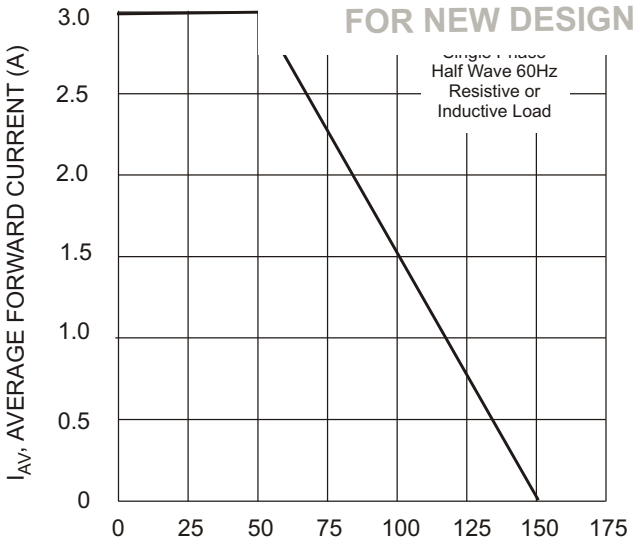


Fig. 1, Typical Forward Current Derating Curve

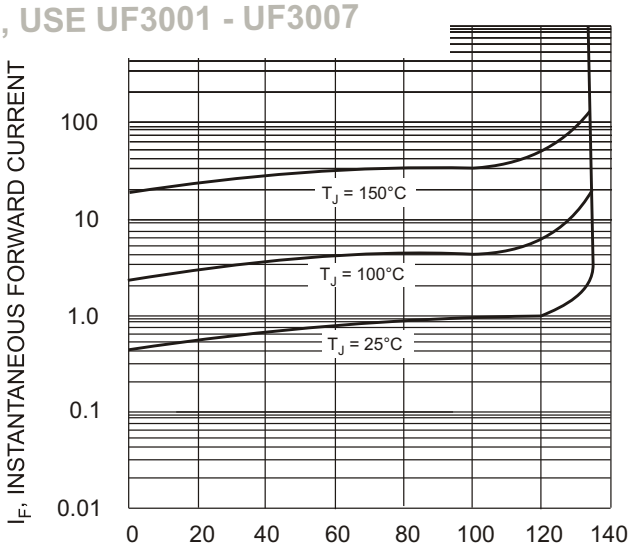


Fig. 2, Typical Reverse Characteristics

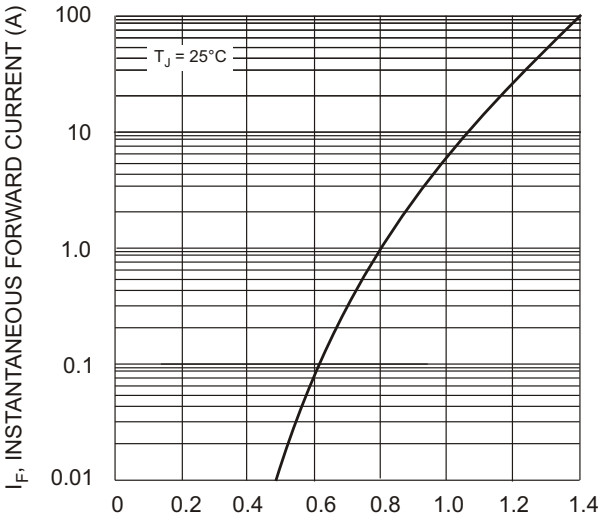


Fig. 3, Typ. Instantaneous Forward Characteristics

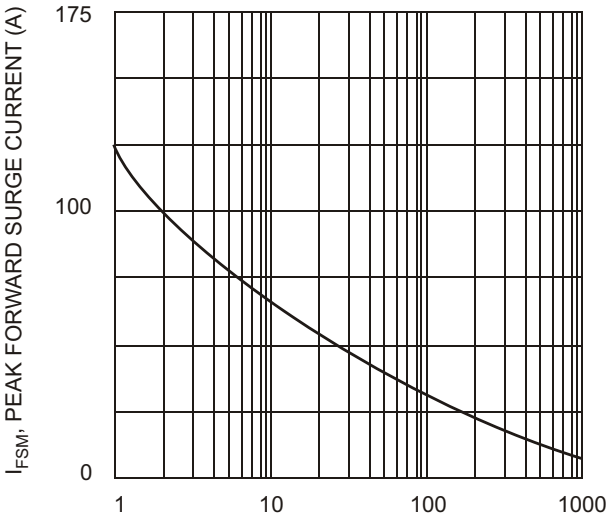


Fig. 4, Max. Non-Repetitive Peak Forward Surge Current

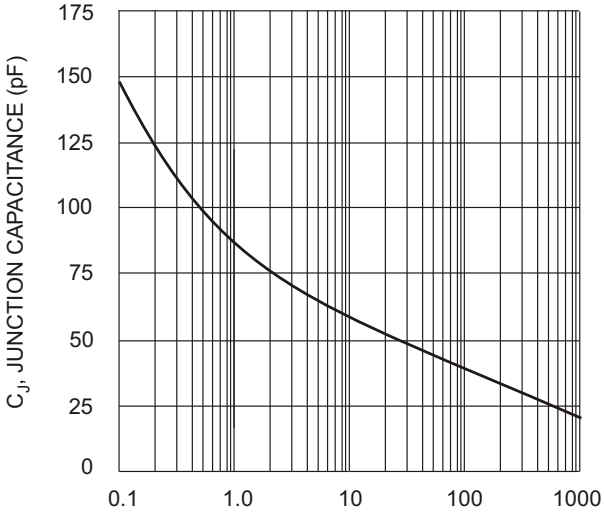


Fig. 5, Typical Junction Capacitance

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