



HER501G THRU HER508G

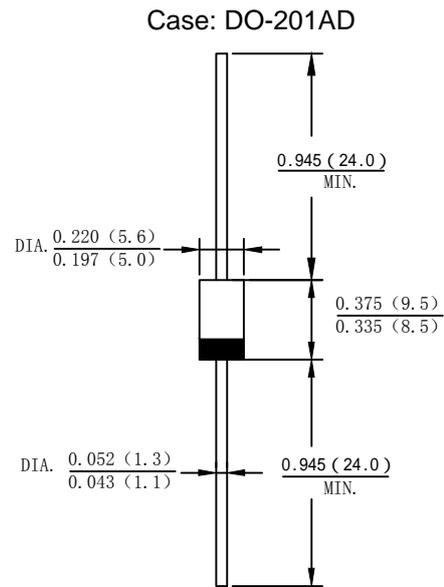
5.0 AMP. Glass High Efficient Rectifiers

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: Molded plastic DO-201AD
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	HER 501G	HER 502G	HER 503G	HER 504G	HER 505G	HER 506G	HER 507G	HER 508G	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	420	630	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current. 375" (9.5mm) lead length @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	5.0								A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150								A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	93.375								A^2s
Forward Voltage @ $I_F=5.0\text{A}$	V_{FM}	1.0		1.3		1.7			V	
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	5.0								uA
At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$		100								
Typical Junction Capacitance (Note 1)	C_J	50				60			pF	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	65								$^\circ\text{C}/\text{W}$
Maximum Reverse Recovery Time (Note 2)	T_{rr}	50				75			ns	
Operating Temperature Range	T_J	-55 to +150								$^\circ\text{C}$
/Storage Temperature Range	T_{STG}	-55 to +150								$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$



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Fig. 1 Forward Current Derating Curve

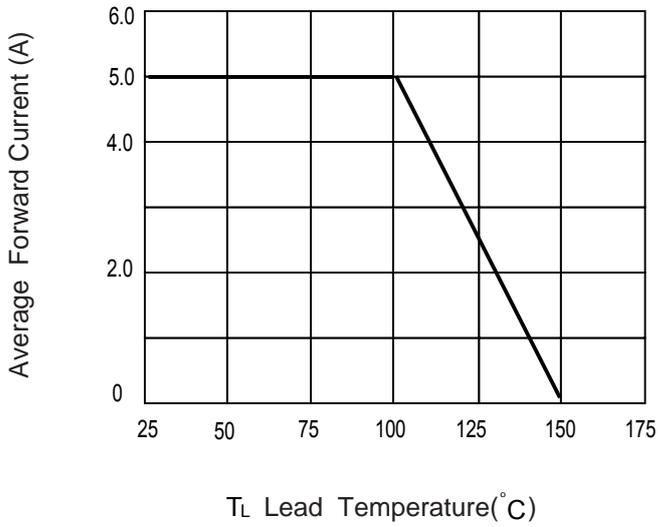


Fig. 2 Typ. Forward Characteristics

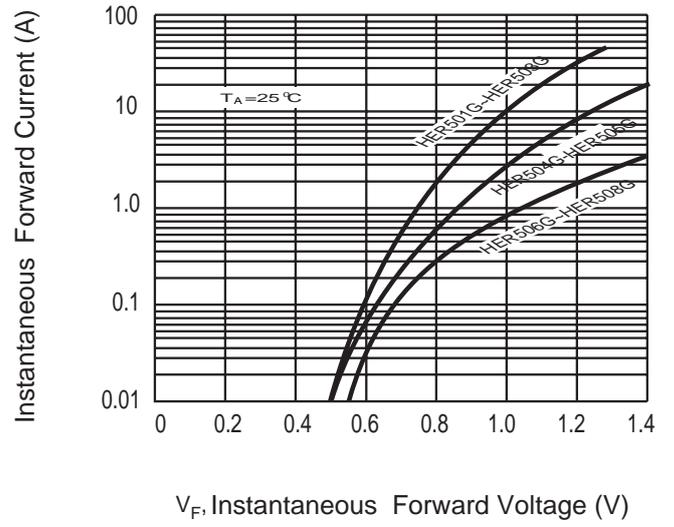


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

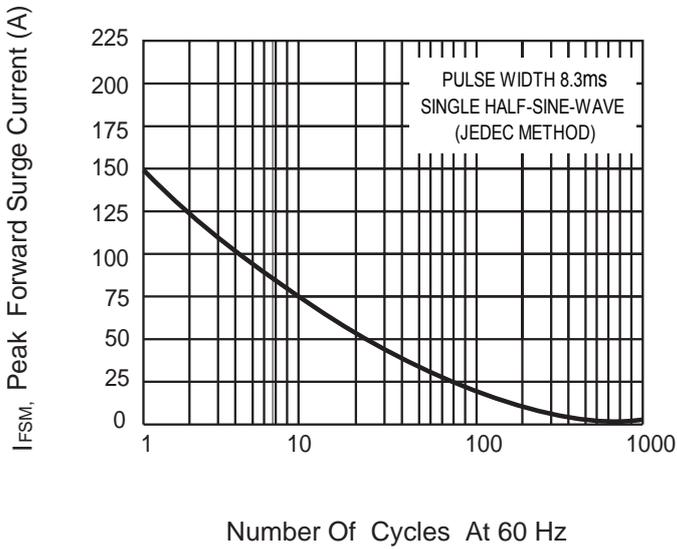
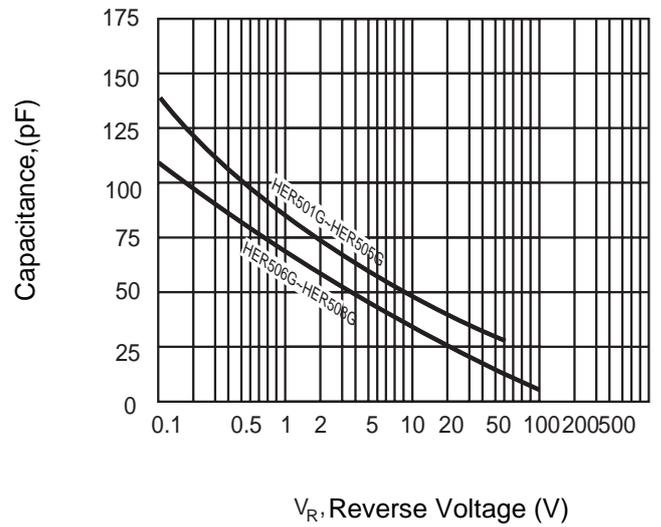


Fig. 4 Typical Junction Capacitance





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