

## HER301 THRU HER308 3.0AMP. Ultrafast Rectifiers (GPP)

**VOLTAGE:50 TO 1000V**

**CURRENT:3.0A**



### Specification Features:

- Case: Epoxy, Molded
- Weight: 1.2Gram (Approximately)
- High current capability, Low leakage current
- High surge current capability
- Finish: All External Surfaces Corrosion Resistant And Terminal Leads Are Readily Solderable
- Lead And Mounting Surface Temperature For Soldering Purposed:  
260°C Max. For 10 Seconds 1/16 Inch From Case
- RoHS Compliant  
Cathode Indicated By Polarity Band

DEVICE MARKING DIAGRAM



HER3XX: Device Name HER301~ HER308  
KEL : KEL Logo

### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

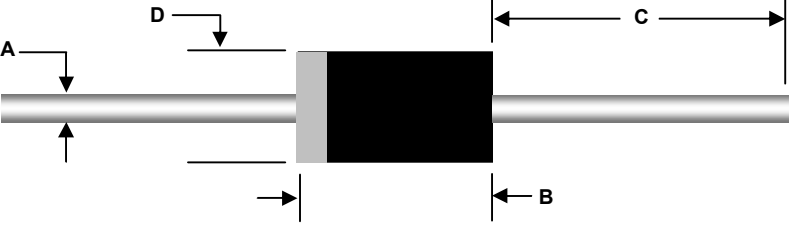
Parameter	Symbol	HER 301	HER 302	HER 303	HER 304	HER 305	HER 306	HER 307	HER 308	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	V
Maximum DC Blocking Voltage	$V_R$	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectifier Current. (0.375" Lead Length @ $T_A=75^\circ\text{C}$ )	$I_{F(AV)}$	3.0								A
Non-repetitive Peak Forward Surge Current. (8.3mS Single Half Sine-wave)	$I_{FSM}$	150								A
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150								$^\circ\text{C}$
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	20								$^\circ\text{C/W}$

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	HER 301	HER 302	HER 303	HER 304	HER 305	HER 306	HER 307	HER 308	Units	
Reverse Current @ $V_R$	$I_R$	5								$\mu\text{A}$	
Forward Voltage @3A	$V_F$	1.0			1.3		1.7			V	
Maximum Reverse Recovery Time (Note 2)	$T_{RR}$	50					75				nS
Total Capacitance @ $V_R=4\text{V}, f=1\text{MHz}$	$C_T$	50								pF	

**NOTE:** (1) Thermal resistance from junction to ambient at 0.375" lead length, vertical P.C. board mounted  
(2) Reverse Recovery Test Conditions:  $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$

## Package Outline

Package	Case Outline				
DO-201AD					
	<b>DO-201AD</b>				
	<b>DIM</b>	<b>Millimeters</b>		<b>Inches</b>	
		Min	Max	Min	Max
	<b>A</b>	1.18	1.30	0.046	0.052
	<b>B</b>	7.20	9.60	0.285	0.375
<b>C</b>	25.40	---	1.000	---	
<b>D</b>	4.80	5.30	0.190	0.210	



## NOTICE

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

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