



Micro Commercial Components



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## HER301 Thru HER308

### Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Low forward voltage drop
- High reliability and High surge current capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 30°C/W Junction To Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HER301	HER301	50V	35V	50V
HER302	HER302	100V	70V	100V
HER303	HER303	200V	140V	200V
HER304	HER304	300V	210V	300V
HER305	HER305	400V	280V	400V
HER306	HER306	600V	420V	600V
HER307	HER307	800V	560V	800V
HER308	HER308	1000V	700V	1000V

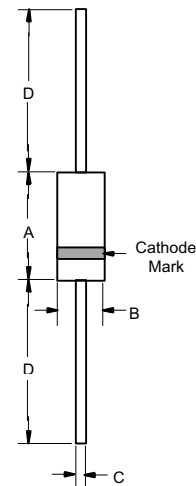
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage HER301-HER303 HER304-HER305 HER306-HER308	$V_F$	1.0V 1.3V 1.7V	$I_{FM} = 3.0A$ ; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10uA 200uA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Maximum Reverse Recovery Time HER301-HER305 HER306-HER308	$T_{rr}$	50ns 75ns	$I_F = 0.5A$ , $I_R = 1.0A$ $I_{RR} = 0.25A$
Typical Junction Capacitance HER301-HER305 HER306-HER308	$C_J$	80pF 50pF	Measured at 1.0MHz, $V_R = 4.0V$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

## 3.0 Amp High Efficient Rectifiers 50 to 1000 Volts

### DO-201AD



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.287	.374	7.30	9.50	
B	.189	.208	4.80	5.30	
C	.048	.052	1.20	1.30	
D	1.000	—	25.40	—	

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## RATINGS AND CHARACTERISTIC CURVES

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

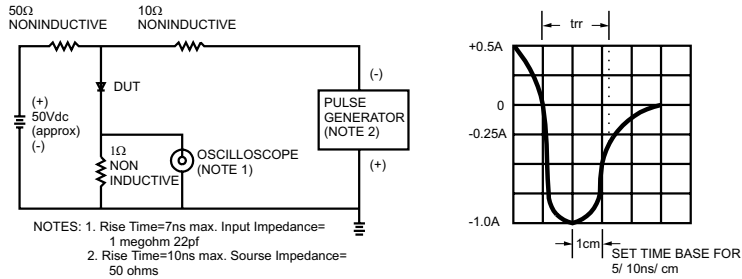


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

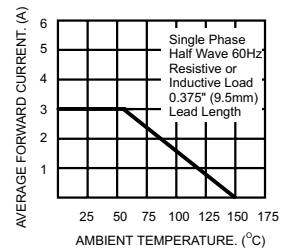


FIG.3- TYPICAL REVERSE CHARACTERISTICS

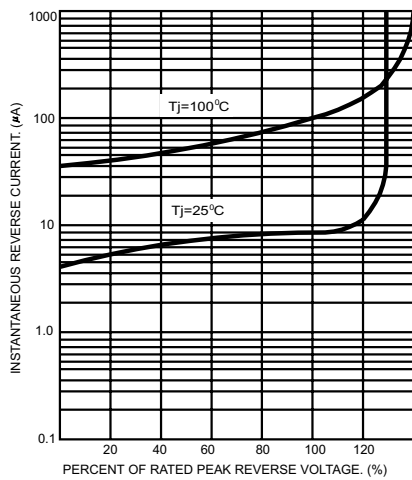


FIG.5- TYPICAL FORWARD CHARACTERISTICS

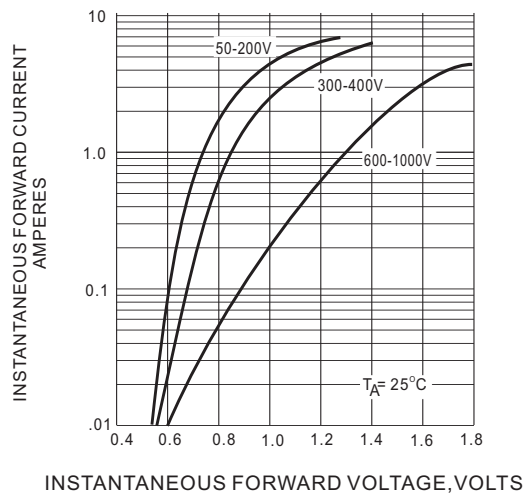


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

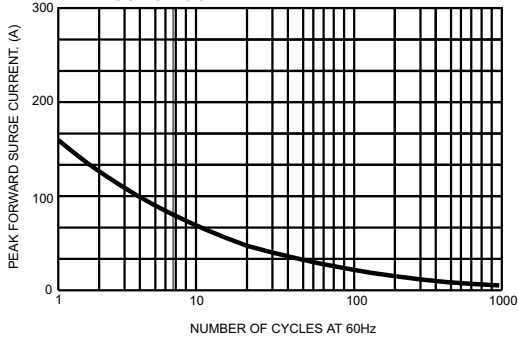
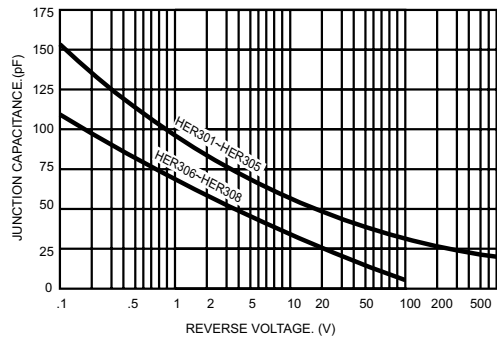


FIG.6- TYPICAL JUNCTION CAPACITANCE





## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 1.2Kpcs/Reel
Part Number-AP	Ammo Packing: 1.2Kpcs/Ammo Box
Part Number-BP	Bulk: 12Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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