



Micro Commercial Components



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# HER301G Thru HER308G

## 3.0 Amps. Glass Passivated High Efficient Rectifiers 50 to 1000 Volts

### Features

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

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance; 20°C/W Junction To Ambient  
5.6°C/W Junction To Lead At 0.375" Lead Length PCB Mounted

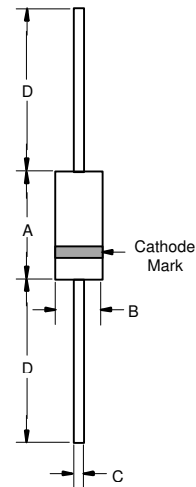
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HER301G	---	50V	35V	50V
HER302G	---	100V	70V	100V
HER303G	---	200V	140V	200V
HER304G	---	300V	210V	300V
HER305G	---	400V	280V	400V
HER306G	---	600V	420V	600V
HER307G	---	800V	560V	800V
HER308G	---	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	$I_{FSM}$	125A	8.3ms, half sine
Maximum Instantaneous Forward Voltage HER301G-304G HER305G HER306G-308G	$V_F$	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 HER301G-305G HER306G-308G	$T_{rr}$	50ns 75ns	$I_F=0.5A, I_R=1.0A$ $I_{RR}=0.25A$
Typical Junction Capacitance HER301G-305G HER306G-308G	$C_J$	80pF 50pF	Measured at 1.0MHz, $V_R=4.0V$

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

### DO-201AD



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.370	---	9.50	
B	---	.250	---	6.40	
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

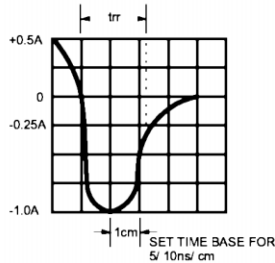
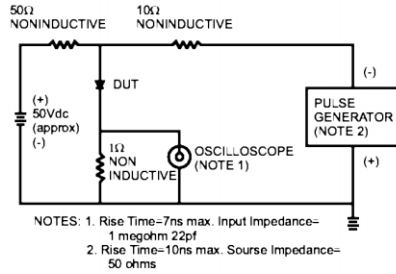


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

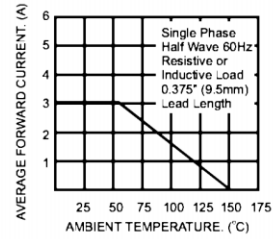


FIG.3- TYPICAL REVERSE CHARACTERISTICS

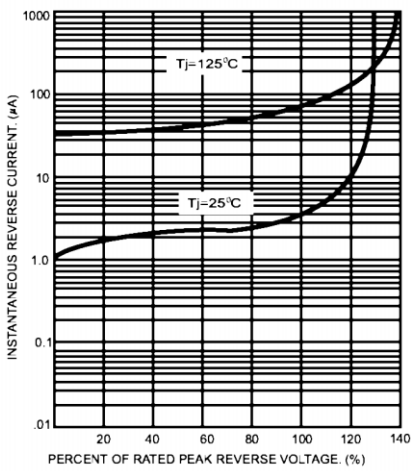


FIG.4- TYPICAL FORWARD CHARACTERISTICS

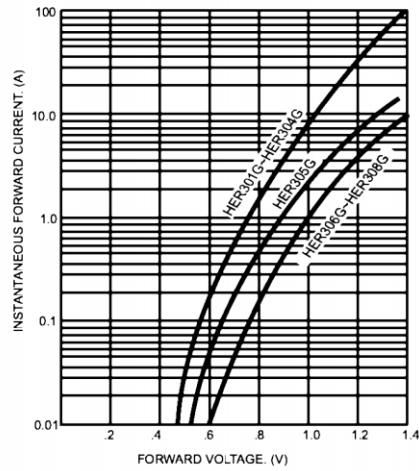


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

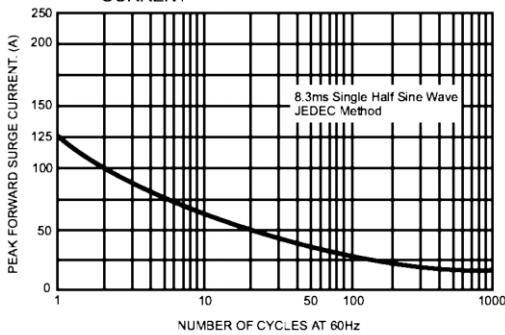
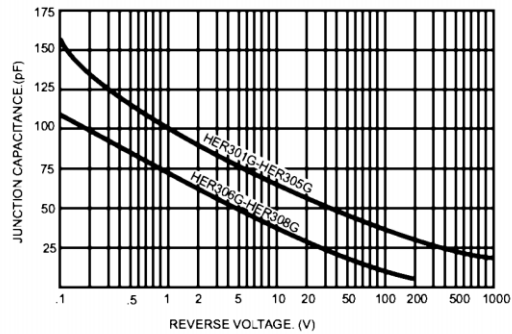


FIG.6- TYPICAL JUNCTION CAPACITANCE





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### 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

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