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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components



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## HER501GP Thru HER508GP

### Features

- Halogen free available upon request by adding suffix "-HF"
- 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

### Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°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
HER501GP	HER501GP	50V	35V	50V
HER502GP	HER502GP	100V	70V	100V
HER503GP	HER503GP	200V	140V	200V
HER504GP	HER504GP	300V	210V	300V
HER505GP	HER505GP	400V	280V	400V
HER506GP	HER506GP	600V	420V	600V
HER507GP	HER507GP	800V	560V	800V
HER508GP	HER508GP	1000V	700V	1000V

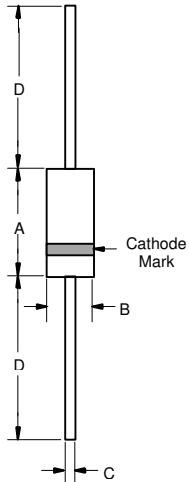
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	5.0A	$T_C = 55^\circ C$
Peak Forward Surge Current	$I_{FSM}$	160A	8.3ms, half sine
Maximum Instantaneous Forward Voltage HER501GP-HER503GP HER504GP-HER505GP HER506GP-HER508GP	$V_F$	1.0V 1.3V 1.7V	$I_{FM} = 5.0A$ ; $T_A = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5uA	$T_A = 25^\circ C$
Maximum Reverse Recovery Time HER501GP-HER505GP HER506GP-HER508GP	$T_{rr}$	50ns 75ns	$I_F = 0.5A$ , $I_R = 1.0A$ $I_{RR} = 0.25A$
Typical Junction Capacitance HER501GP-HER505GP HER506GP-HER508GP	$C_J$	100pF 65pF	Measured at 1.0MHz, $V_R = 4.0V$

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

### 5.0 Amp Glass Passivated High Efficient Rectifiers 50 to 1000 Volts

### DO-201AD



DIMENSIONS					
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	---	

# HER501GP THRU HER508GP

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

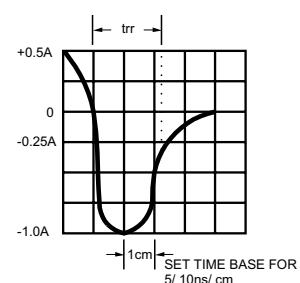
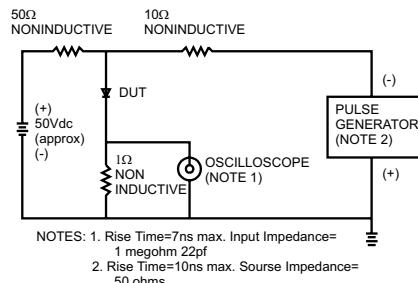


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

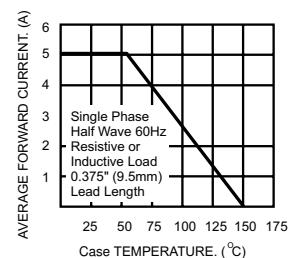


FIG.3- TYPICAL REVERSE CHARACTERISTICS

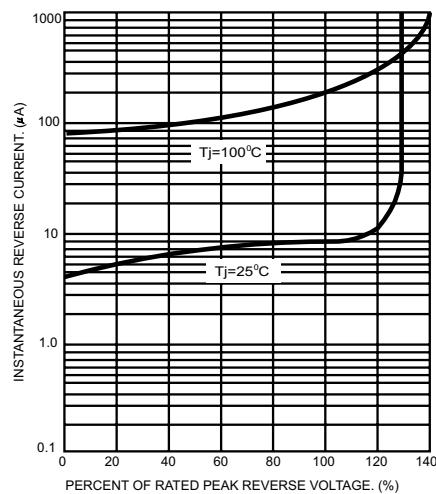


FIG.5- TYPICAL FORWARD CHARACTERISTICS

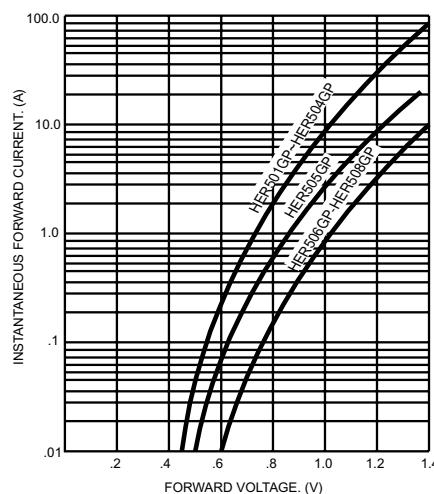


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

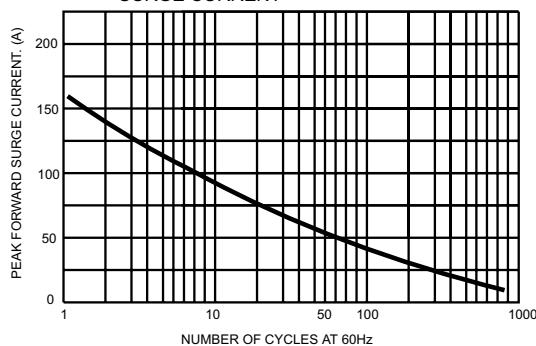
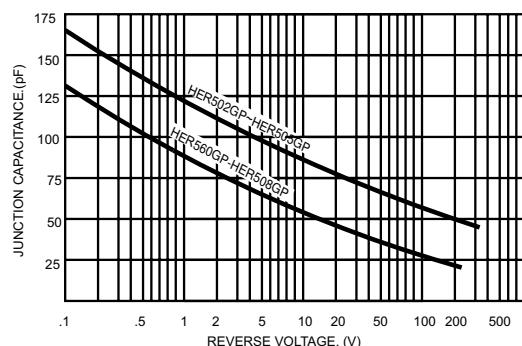


FIG.6- TYPICAL JUNCTION CAPACITANCE



**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: 12 Kpcs/Carton

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

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