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# HER601GP **THRU** HER608GP

6.0 Amp Glass **Passivated High Efficient Rectifiers** 

50 to 1000 Volts

## **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
  Glass Passivated Junction

- High Surge Current Capability and High Reliability
  Halogen free available upon request by adding suffix "-HF"
  Epoxy meets UL 94 V-0 flammability rating
  Moisture Sensitivity Level 1

**Maximum Ratings** 

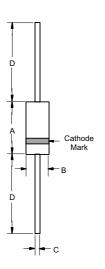
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- For capacitive load, derate current by 20%

MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Recurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
HER601GP	HER601GP	50V	35V	50V
HER602GP	HER602GP	100V	70V	100V
HER603GP	HER603GP	200V	140V	200V
HER604GP	HER604GP	300V	210V	300V
HER605GP	HER605GP	400V	280V	400V
HER606GP	HER606GP	600V	420V	600V
HER607GP	HER607GP	800V	560V	800V
HER608GP	HER608GP	1000V	700V	1000V

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

Average Forward Current	I <sub>F(AV)</sub>	6 A	T <sub>A</sub> = 55°C
Peak Forward Surge Current	I <sub>FSM</sub>	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage HER601GP-604GP HER605GP HER606GP-608GP	$V_{F}$	1.1V 1.3V 1.7V	I <sub>FM</sub> = 6.0A; T <sub>A</sub> = 25°C
Reverse Current At Rated DC Blocking Voltage (Maximum DC)	I <sub>R</sub>	10μΑ 200μΑ	T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C
Maximum Reverse Recovery Time HER601GP-605GP HER606GP-608GP	T <sub>rr</sub>	50ns 75ns	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A
Typical Junction Capacitance HER601GP-605GP HER606GP-608GP	CJ	100pF 65pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

R-6



DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.340	.360	8.60	9.10		
В	.340	.360	8.60	9.10		
С	.048	.052	1.20	1.30		
D	1.000		25.40			

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

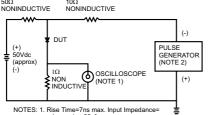
<sup>\*</sup>Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

## HER601GP thru HER608GP



#### RATINGS AND CHARACTERISTIC CURVES

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





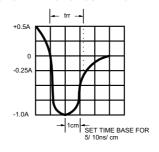


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

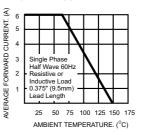


FIG.3- TYPICAL REVERSE CHARACTERISTICS

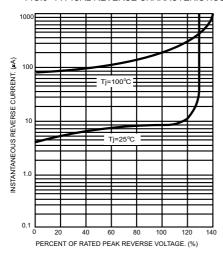


FIG.5- TYPICAL FORWARD CHARACTERISTICS

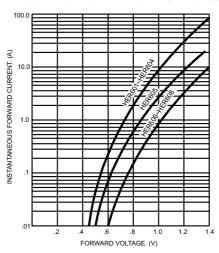
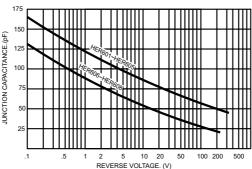


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT 200 PEAK FORWARD SURGE CURRENT.

NUMBER OF CYCLES AT 60Hz

FIG.6- TYPICAL JUNCTION CAPACITANCE





### **Ordering Information:**

Device	Packing
Part Number-TP	Tape&Reel: 500pcs/Reel
Part Number-AP	Ammo Packing: 450pcs/Ammo Box
Part Number-BP	Bulk: 4.8Kpcs/Carton

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

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