

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Forward Voltage Drop
- Glass Passivated Junction
- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 50°C/W Junction to Ambient
- Typical Thermal Resistance: 25°C/W Junction to Lead
- Typical Thermal Resistance: 5.0°C/W Junction to Case

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

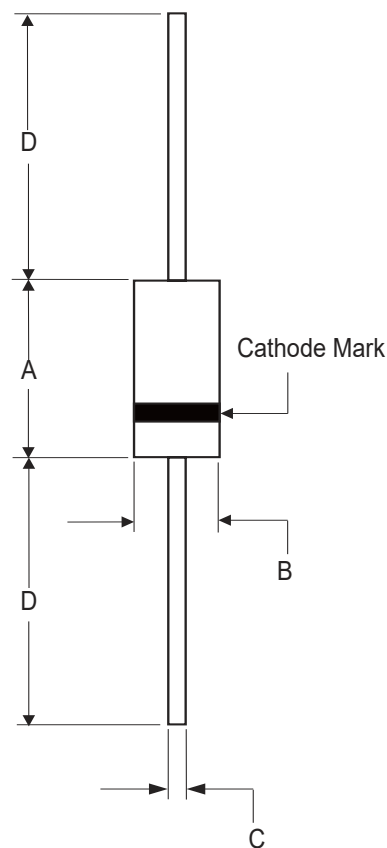
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	5.0A	$T_C=108^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	160A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage HER501GP-503GP HER504GP-505GP HER506GP-508GP	V_F	1.0V 1.3V 1.7V	$I_{FM}=5.0A$; $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μ A	$T_J=25^\circ\text{C}$
Typical Junction Capacitance HER501GP-505GP HER506GP-508GP	C_J	100pF 60pF	Measured at 1.0MHz $V_R=4.0V$
Maximum Reverse Recovery Time HER501GP-505GP HER506GP-508GP	t_{rr}	50ns 75ns	$I_F=0.5A$; $I_R=1.0A$; $I_{rr}=0.25A$

Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

5.0 Amp High Efficient Rectifier 50 to 1000 Volts

DO-201AD



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.287	0.374	7.30	9.50	
B	0.189	0.208	4.80	5.30	
C	0.048	0.052	1.20	1.30	
D	1.000	-----	25.40	-----	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

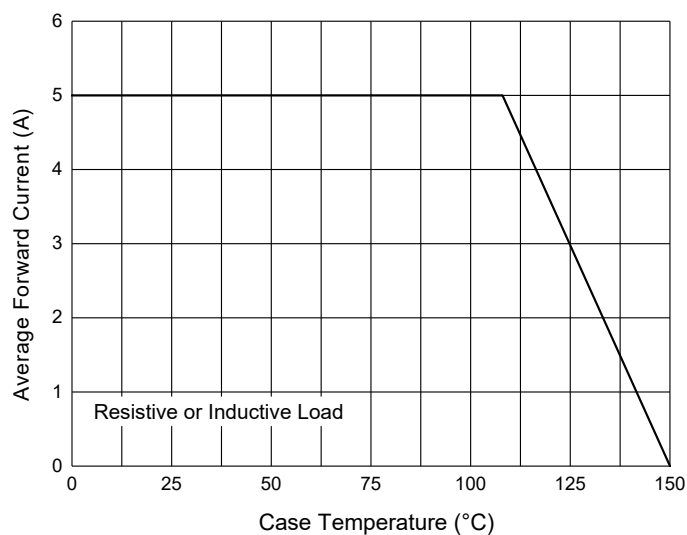


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

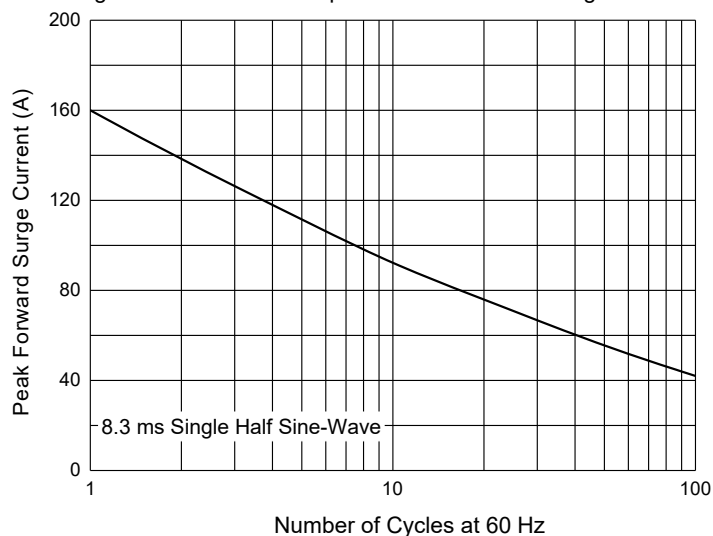


Fig. 3 - Typical Instantaneous Forward Characteristics

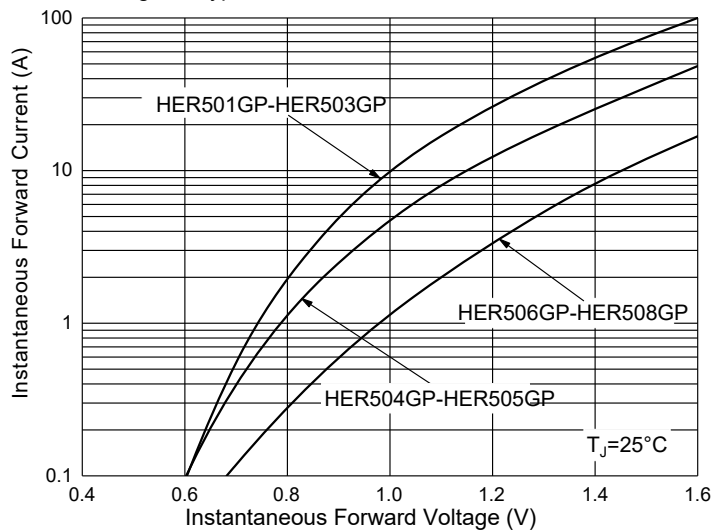
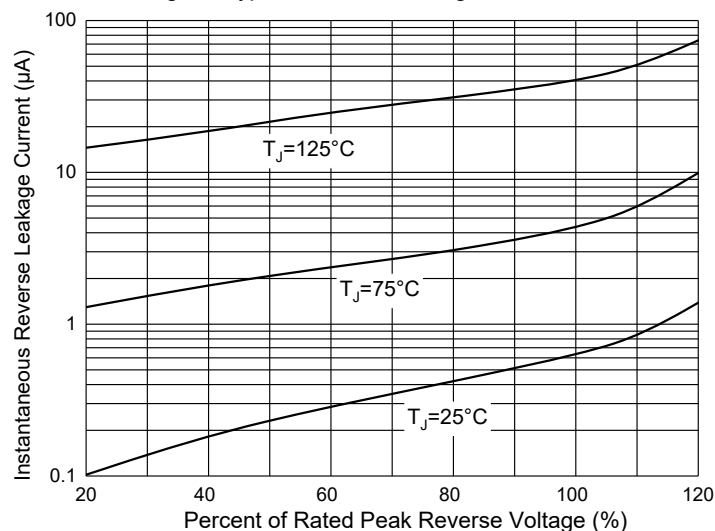


Fig. 4 - Typical Reverse Leakage Characteristics



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:500pcs/Box,12Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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