

## **Features**

- Glass Passivated Junction
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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 +125°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 18°C/W Junction to Case
- Typical Thermal Resistance: 60°C/W Junction to Ambient

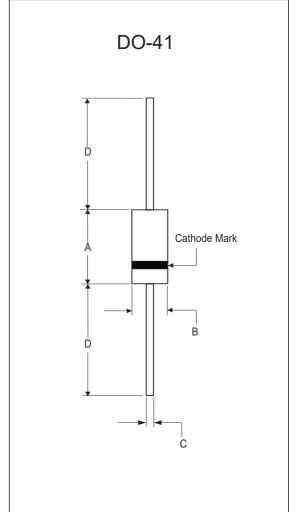
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HER101G	HER101G	50V	35V	50V
HER102G	HER102G	100V	70V	100V
HER103G	HER103G	200V	140V	200V
HER104G	HER104G	300V	210V	300V
HER105G	HER105G	400V	280V	400V
HER106G	HER106G	600V	420V	600V
HER107G	HER107G	800V	560V	800V
HER108G	HER108G	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>A</sub> =55°C
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage HER101G-104G HER105G HER106G-108G	$V_{F}$	1.0V 1.3V 1.7V	I <sub>FM</sub> =1.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 150μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Typical Junction Capacitance HER101G-105G HER106G-108G	С	20pF 15pF	Measured at 1.0MHz V <sub>R</sub> =4.0V
Maximum Reverse Recovery Time HER101G-105G HER106G-108G	t <sub>rr</sub>	50ns 75ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A

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

# 1.0 Amp High Efficient Rectifier 50 to 1000 Volts



DIMENSIONS						
DIM INC		HES	MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.160	0.205	4.10	5.20		
В	0.080	0.107	2.00	2.70	Ф	
С	0.028	0.035	0.71	0.90	Ф	
D	1.000		25.40			



## **Curve Characteristics**

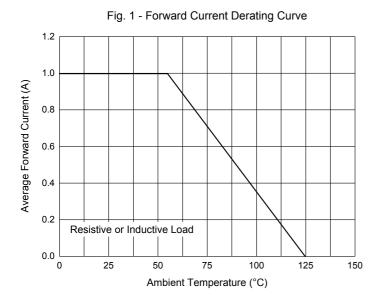
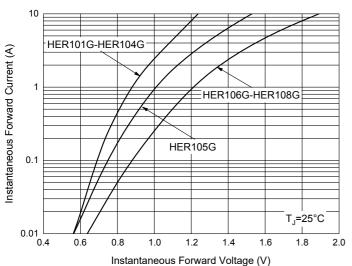


Fig. 3 - Typical Instantaneous Forward Characteristics



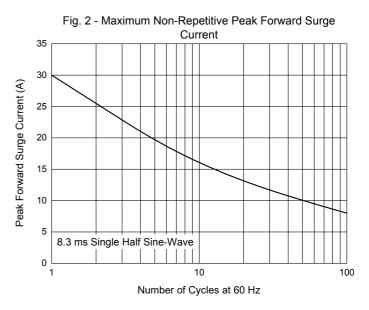
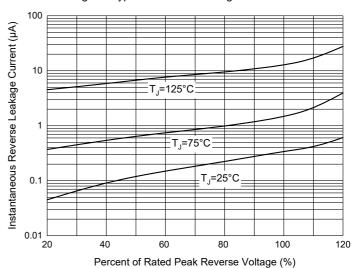


Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing		
(Part Number)-TP	Tape&Reel: 5Kpcs/Reel		
(Part Number)-AP	Ammo Packing: 5Kpcs/Ammo Box		
(Part Number)-BP	Bulk:1Kpcs/Box,50Kpcs/Carton		

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

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