Features

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

1 Amp High Efficient Rectifier 50 to 1000 Volts

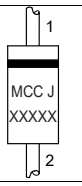
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value								Unit
		HER 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	HER 108G	
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}									
DC Blocking Voltage	V_R									
RMS Reverse Voltage	V_{RMS}	35	70	140	210	280	420	560	700	V
Average Rectified Forward Current @ T_A=55°C	$I_{F(AV)}$	1								A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	30								A
Non-Repetitive Peak Surge Current @ 1ms Square Wave		60								
Current Squared Time @1ms≤t≤8.3ms	I^2t	3.735								A^2s

Marking code

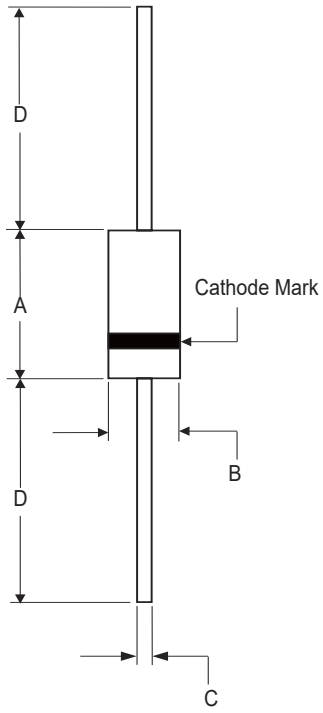
Part Number	Marking Code
HER101G	HER101G
HER102G	HER102G
HER103G	HER103G
HER104G	HER104G
HER105G	HER105G
HER106G	HER106G
HER107G	HER107G
HER108G	HER108G

Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode		
2	Anode		

Note: 1. High temperature solder exemption applied, see EU directive annex 7a.

DO-41



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.160	0.205	4.10	5.20	
B	0.080	0.107	2.00	2.70	Φ
C	0.028	0.035	0.71	0.90	Φ
D	1.000	-----	25.40	-----	

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$Rth_{(J-L)}$	Thermal Resistance from Junction to Lead	Note 1		18		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		60		°C/W

Note:
1.Thermal Resistance from Junction to Ambient at 0.375" (9.5 mm) Lead Length.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage HER101G ~HER104G HER105G HER106G ~HER108G	V_F	I_F=1A;T_J=25°C			 1.0 1.3 1.7	V
Reverse Current	I_R	at Rated V_R;T_J=25°C at Rated V_R;T_J=125°C			5 150	μA
Reverse Recovery Time HER101G ~HER105G HER106G ~HER108G	t_{rr}	I_F=0.5A; I_R=1.0A; I_{rr}=0.25A;T_J=25°C			50 75	ns
Junction Capacitance HER101G ~HER104G HER105G HER106G ~HER108G	C_J	V_R=4V;f=1MHz;T_J=25°C		18 12 8		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

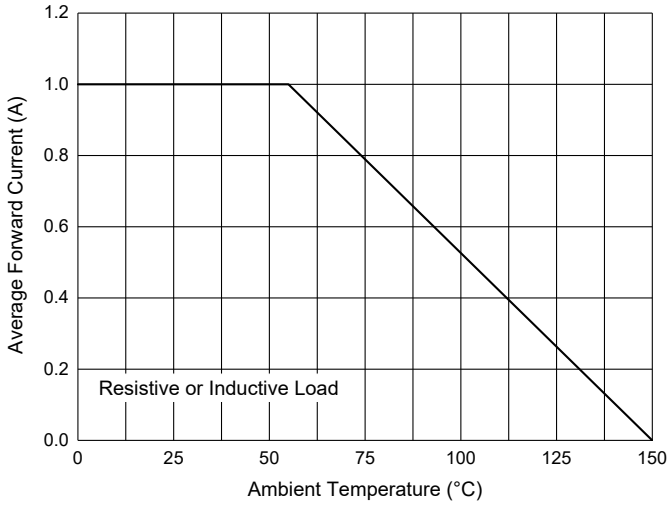


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

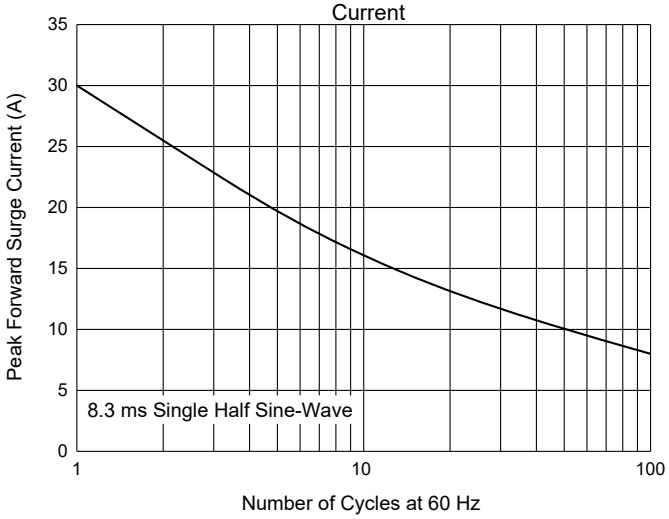


Fig. 3 - Typical Forward Characteristics

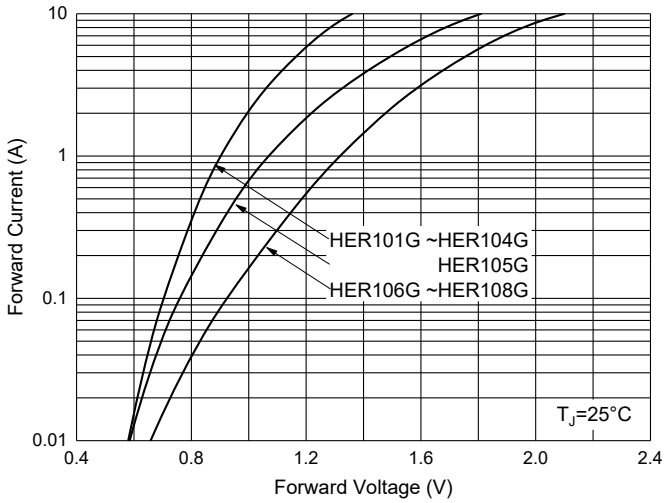


Fig. 4 - Typical Reverse Leakage Characteristics

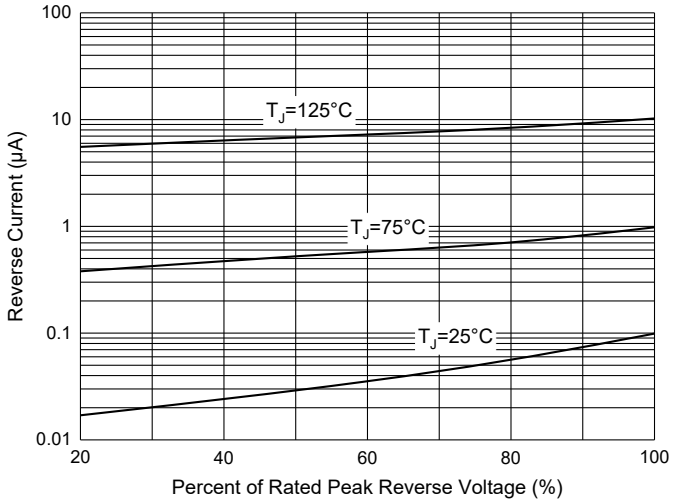
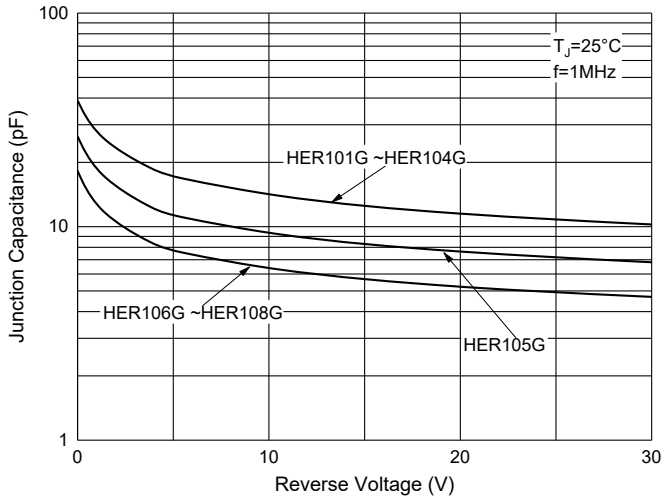


Fig. 5 - Typical Capacitance Characteristics



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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