



6A, 50V - 600V Glass Passivated High Efficient Rectifiers

FEATURES

- Glass passivated chip junction
- High efficiency, Low VF
- High current capability
- High reliability

Case: R-6

- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



Molding compound, UL flammability classification rating 94V-0

Part No. with suffix "H" means AEC-Q101 qualified

Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Pure tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test **Weight:** 1.65 g (approximately)



R-6





DADAMETED	SYMBOL	HER	HER	HER	HER	HER	HER	LINIT
PARAMETER		601G	602G	603G	604G	605G	606G	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	V
Maximum average forward rectified current	$I_{F(AV)}$	6					Α	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150					Α	
Maximum instantaneous forward voltage (Note 1) @ 6 A	V _F	1.0 1.3		1.7	V			
Maximum reverse current @ rated V_R $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	I _R	10 200					μΑ	
Maximum reverse recovery time (Note 2)	t _{rr}	50 75					75	ns
Typical junction capacitance (Note 2)	CJ			80			65	pF
Typical thermal resistance	$R_{\theta JA}$	37			°C/W			
Operating junction temperature range	T_J	- 55 to +150			°C			
Storage temperature range	T _{STG}	- 55 to +150			_	°C		

Note 1: Pulse Test with PW=300µs, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.



ORDERING INFORMATION						
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX ^(*)	PACKAGE	PACKING	
LIEDOS O		A0		R-6	700 / Ammo box	
HER60xG (Note 1)	Н	R0	G	R-6	1,000 / 13" Paper reel	
(14010-1)		В0		R-6	400 / Bulk packing	

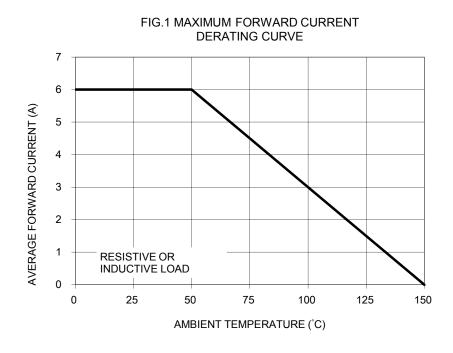
Note 1: "x" defines voltage from 50V (HER601G) to 600V (HER606G)

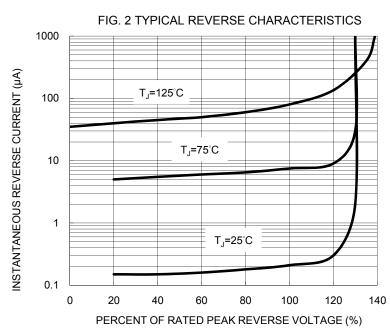
^{*:} Optional available

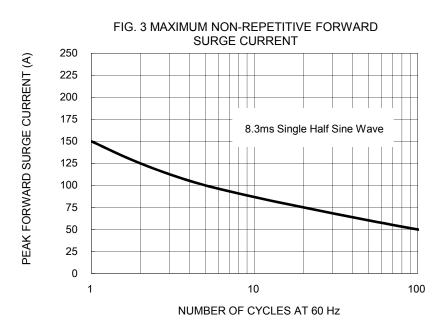
EXAMPLE						
PREFERRED P/N	PART NO. PART NO. SUFFIX PACKING CODE		PACKING CODE SUFFIX	DESCRIPTION		
HER605GHA0G	HER605G	Н	A0	G	AEC-Q101 qualified Green compound	

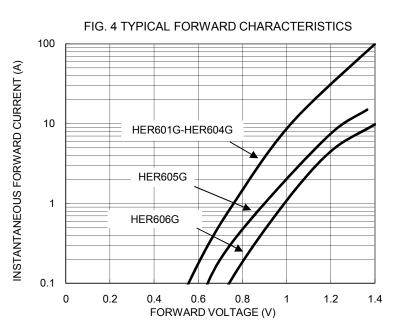
RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

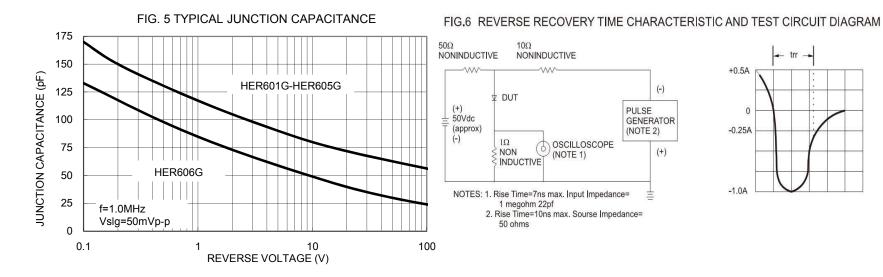






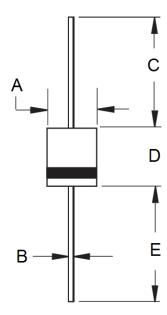






PACKAGE OUTLINE DIMENSIONS





DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	Min	Max Min		Max	
Α	6.80	7.20	0.268	0.283	
В	1.20	1.30	0.047	0.051	
С	25.40	-	1.000	-	
D	8.60	9.10	0.339	0.358	
Е	25.40	_	1.000	_	

MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code

Document Number: DS_D1408002



Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

Document Number: DS_D1408002 Version: G15