Elektronische Bauelemente

HER11G~HER17G

Voltage 50~1000V

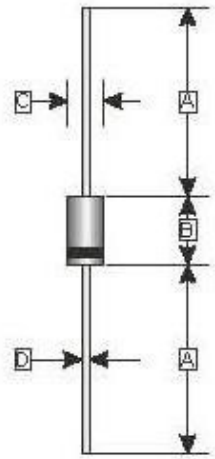
1.0 Amp Glass Passivated High Efficiency Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- High Speed Switching

DO-41



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP.)	
B	4.10	5.21
C	2.00	3.00
D	0.60	0.90

MECHAMICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any

ORDER INFORMATION

Part Number	Type
HER11G~HER17G	Lead (Pb)-free
HER11G-C~HER17G-C	Lead (Pb)-free and Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(T_A=25℃ unless otherwise specified. Single phase half -wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.

Parameters		Symbol	Part Number							Unit
			HER 11G	HER 12G	HER 13G	HER 14G	HER 15G	HER 16G	HER 17G	
Maximum Recurrent Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	
Instantaneous Forward Voltage @I_F=1A		V_F	1			1.3	1.7			V
Average Rectified Output Current [1] @T_L=90℃		I_F	1							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	35							A
I^2t Rating for Fusing (t<8.3ms)		I^2t	5.084							A^2S
Peak Reverse Current @Rated DC Blocking Voltage	T_A=25℃	I_R	5							uA
	T_A=125℃		100							
Reverse Recovery Time [2]		T_{RR}	50				75			nS
Junction Capacitance [3]		C_J	8							pF
Thermal Resistance Junction- Ambient [4]		$R_{\theta JA}$	65							℃/W
Operating & Storage Temperature Range		T_J, T_{STG}	-55~150							℃

Notes:

1. Leads maintained at ambient temperature at a distance of 9.5mm from the case.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, I_{rr}=0.25A.
3. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
4. Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length.

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CHARACTERISTIC CURVES

FIG. 1 – FORWARD CURRENT DERATING CURVE

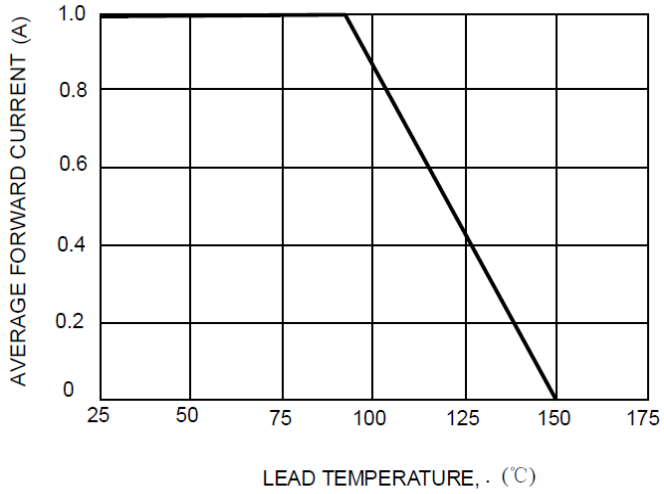

FIG.2-TYPICAL FORWARD CHARACTERISTICS

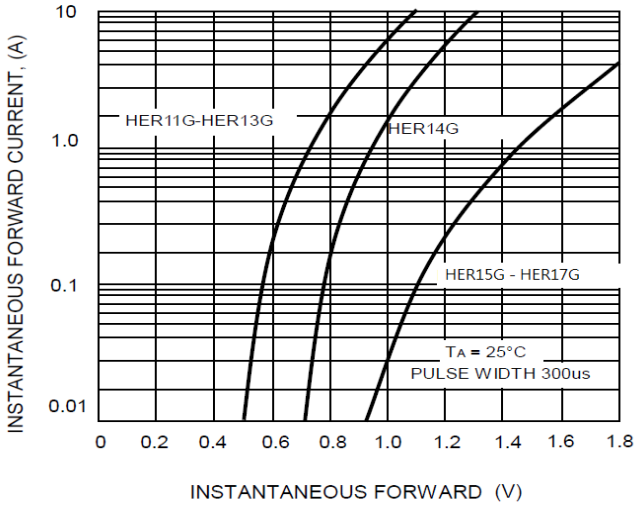

FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

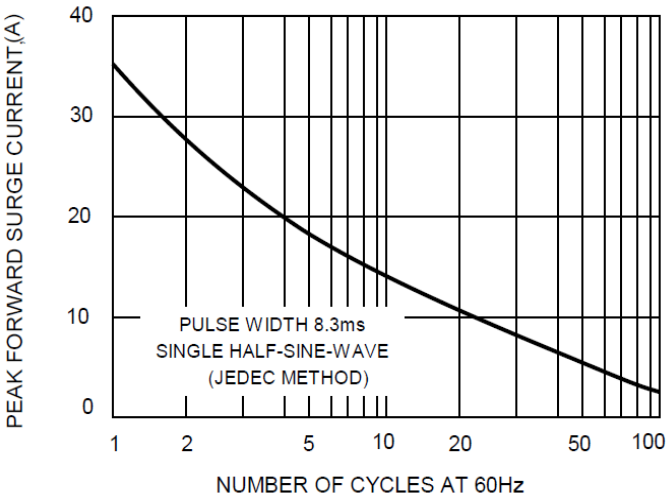

FIG. 4 TYPICAL REVERSE CHARACTERISTICS