



High Efficiency Glass Passivated Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 1.0 Ampere

Features

- Low cost
- Ultra fast switching for high efficiency
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

Mechanical Data

- Case: JEDEC DO-41 Molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

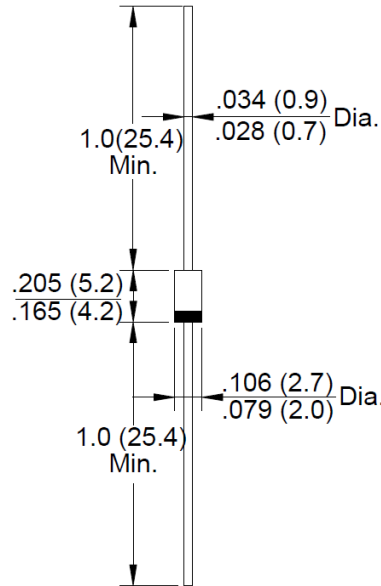
Applications

- For use in SMPS, high frequency inverters, PWM and polarity protection applications

DO-41



RoHS COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	HER 101G	HER 102G	HER 103G	HER 104G	HER 105G	HER 106G	HER 107G	HER 108G	Unit
		UF 4001G	UF 4002G	UF 4003G	UF 4004G	UF 4005G	UF 4006G	UF 4007G	UF 4008G	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _A =55 °C	I _(AV)	1.0								A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30								A
Peak Forward Voltage at 1.0 A DC	V _F	1.0		1.3		1.7			V	
Maximum DC Reverse Current at Rated @T _J =25°C	I _R	5.0				100				µA
DC Blocking Voltage @T _J =100°C										
Maximum Reverse Recovery Time (Note 1)	T _{RR}	50				75			nS	
Typical Junction Capacitance (Note2)	C _J	20				10			pF	
Typical Thermal Resistance Junction to Ambient	R _{θJA}	25								°C/W
Operating Junction Temperature Range	T _J	-55 to +150								°C
Storage Temperature Range	T _{STG}	-55 to +150								°C

- Notes: 1.Measured with I_F=0.5A,I_R=1A,I_{RR}=0.25A .
2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
3.The typical data above is for reference only.



Fig. 1 - Forward Current Derating Curve

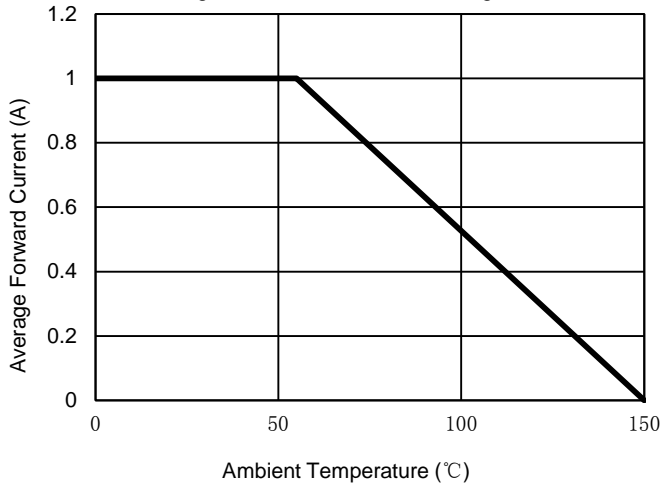


Fig. 2 - Maximum Non-Repetitive Surge Current

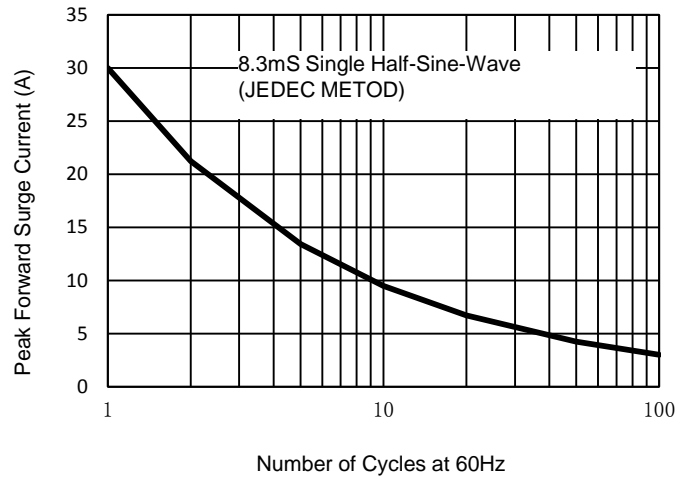


Fig. 3 - Typical Junction Capacitance

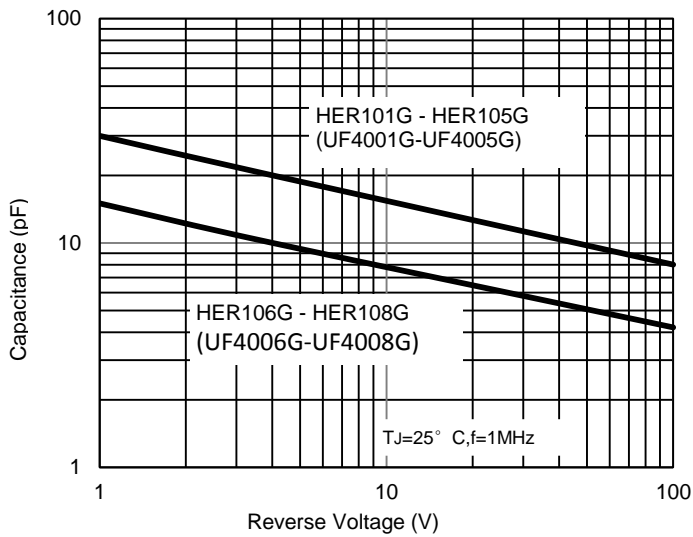


Fig. 4 - Typical Forward Characteristics

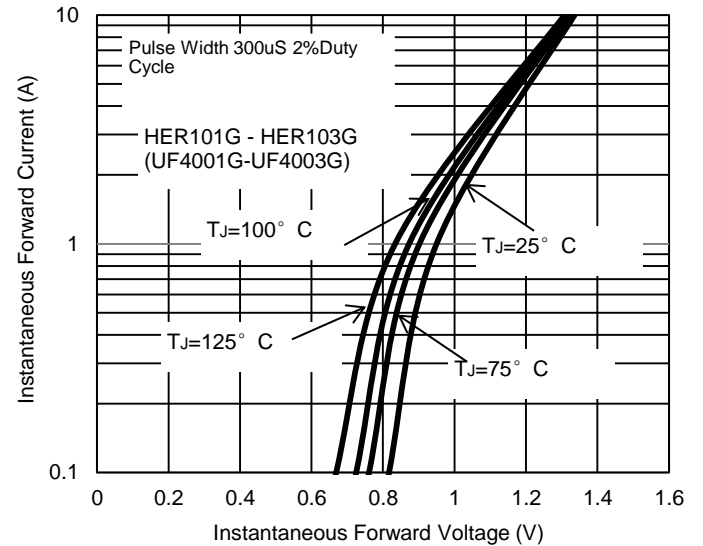


Fig. 5 - Typical Forward Characteristics

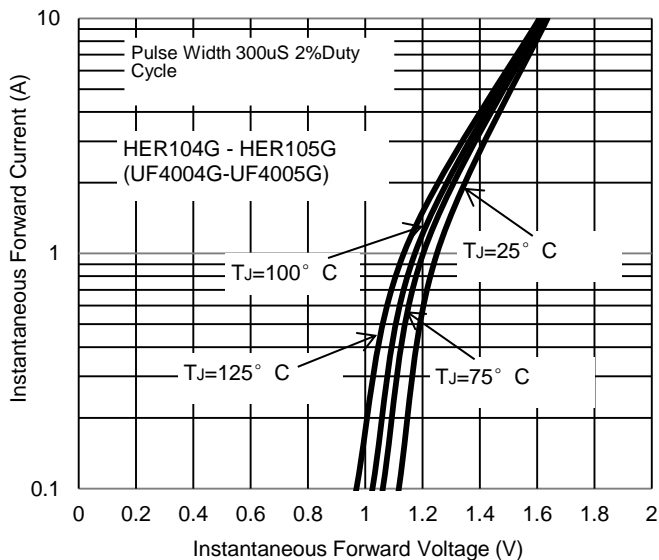
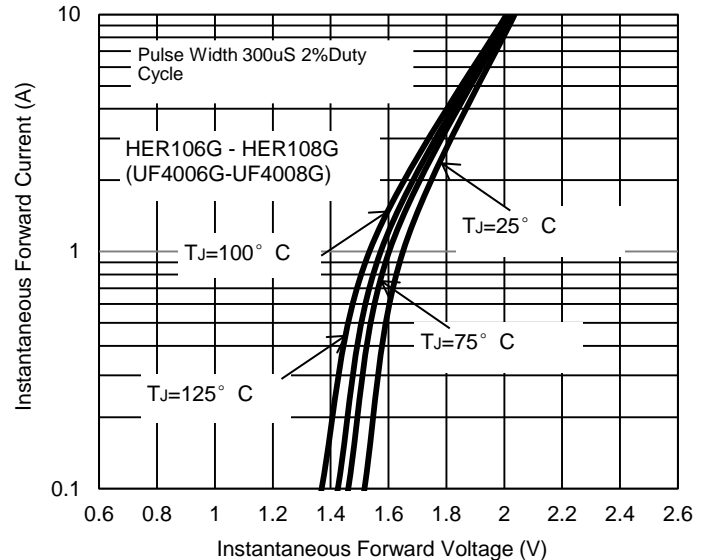


Fig. 6 - Typical Forward Characteristics





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