

High Efficiency Glass Passivated Rectifiers

Reverse Voltage - 50 to 1000 Volts
Forward Current - 3.0 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

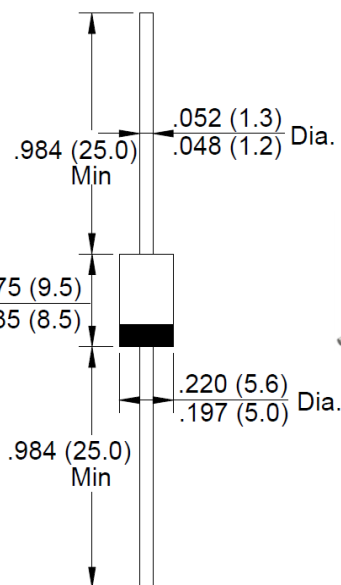
Mechanical Data

- Case: JEDEC DO-27 Molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Applications

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

DO-27



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 301G	HER 302G	HER 303G	HER 304G	HER 305G	HER 306G	HER 307G	HER 308G	Unit
		UF 3001G	UF 3002G	UF 3003G	UF 3004G	UF 3005G	UF 3006G	UF 3007G	UF 3008G	
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)	3.0								A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I _{FSM}	125								A
Peak Forward Voltage at 3.0 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								μA
DC Blocking Voltage @T _J =100°C		100								
Maximum Reverse Recovery Time (Note 1)	T _{RR}	50					75			nS
Typical Junction Capacitance (Note2)	C _J	50					30			pF
Typical Thermal Resistance Junction to Ambient	RθJA	20								°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,IRR=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.

HER30*G/UF300*G-A/B/T-00/99-00/01

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Fig. 1 - Forward Current Derating Curve

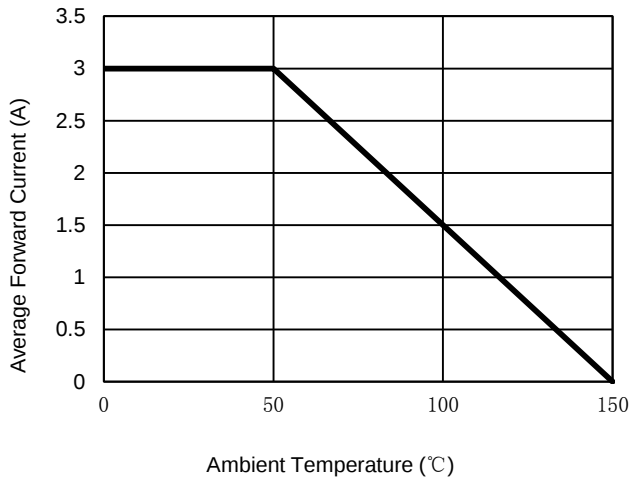


Fig. 2 - Maximum Non-Repetitive Surge Current

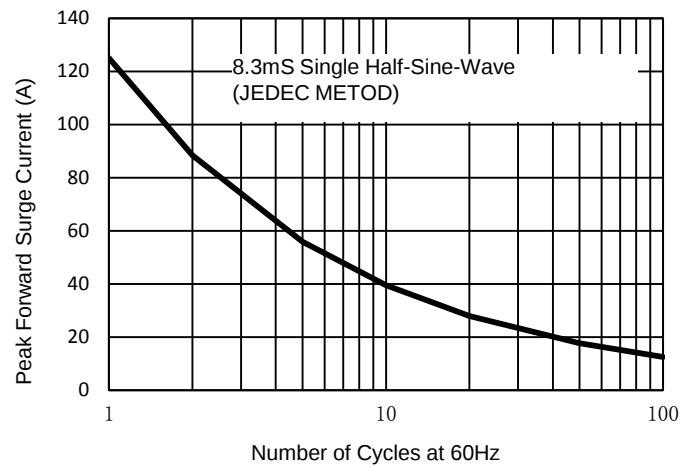


Fig. 3 - Typical Junction Capacitance

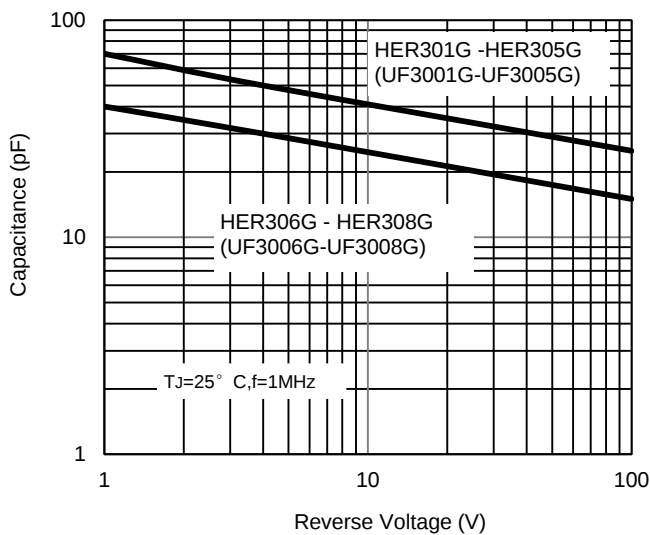


Fig. 4 - Typical Forward Characteristics

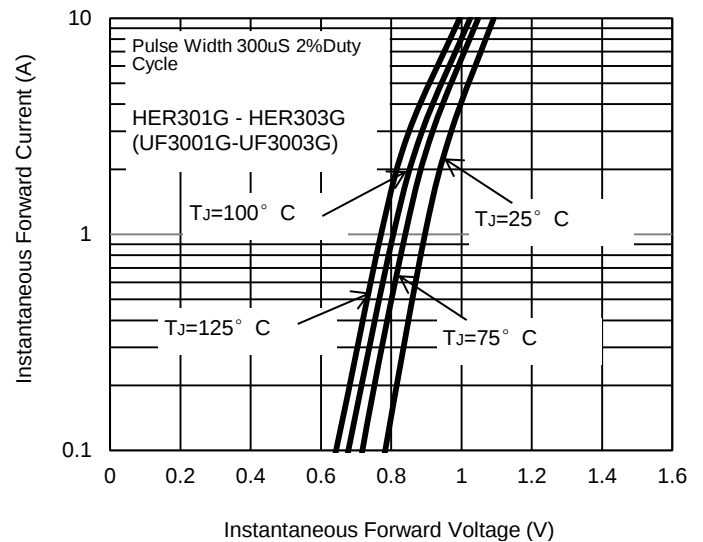


Fig. 5 - Typical Forward Characteristics

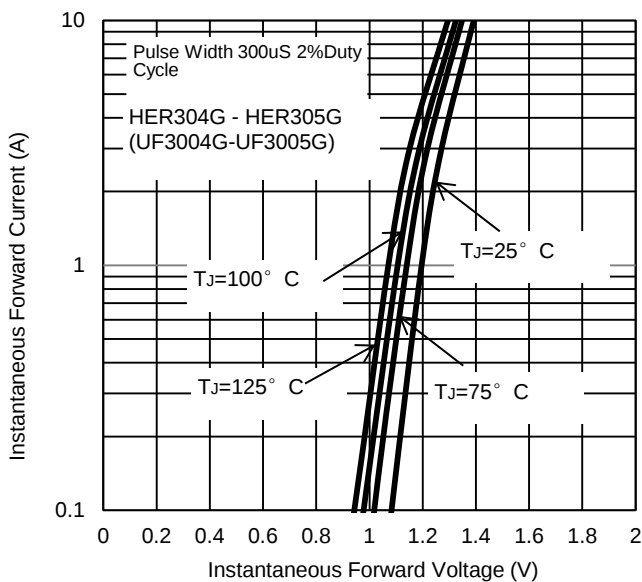
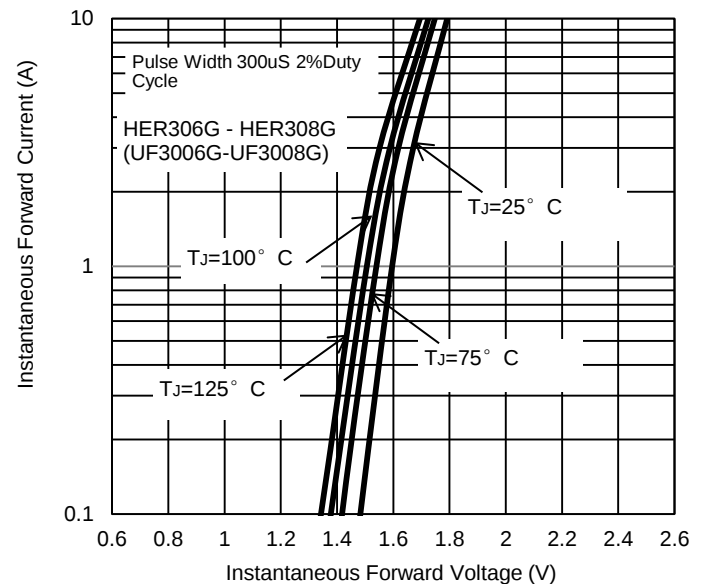


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.

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