High Efficiency Glass
Passivated Rectifier

Features

- Low cost
- Diffused junction
- 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 : Colour band denotes cathode
Weight : 0.04ounces , 1.1grams
Mounting Position : Any
Reverse Voltage : 800 to 1000 Volts
Forward Current : 3 Ampere

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	HER307G	HER308G	Unit
Max. Recurrent Peak Reverse Voltage	V_{RRM}	800	1000	V
Max. RMS Voltage	V_{RMS}	560	700	V
Max. DC Blocking Voltage	V_{DC}	800	1000	V
Max. Average Forward Rectified Current @T_A = 55°C	$I_{(AV)}$	3.0		A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	125		A
Peak Forward Voltage at 3A DC	V_F	1.7		V
Maximum DC Reverse Current @T_J = 25°C at Rated DC Blocking Voltage @T_J = 100°C	I_R	5 100		μA
Maximum Reverse Recovery Time (Note 1)	Trr	75		nS
Typical Junction Capacitance (Note 2)	C_J	30		pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	20		°C/W
Operating 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 1MHz and applied reverse voltage of 4V DC
3. Thermal resistance junction to ambient.
4. The typical data above is for reference only

Ratings and Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

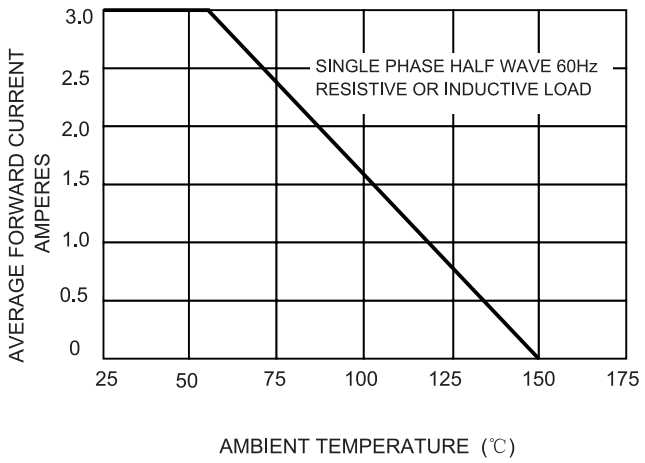


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

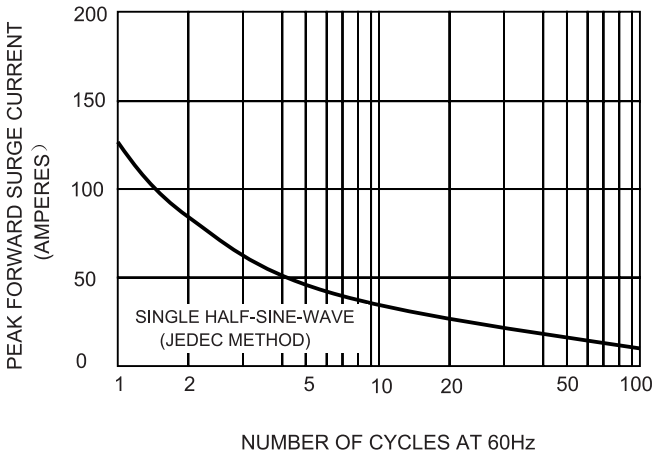


FIG. 3 – TYPICAL JUNCTION CAPACITANCE

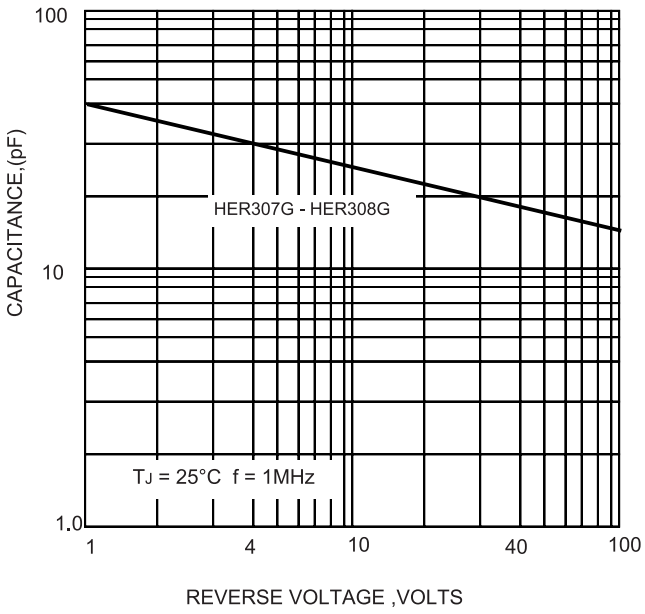
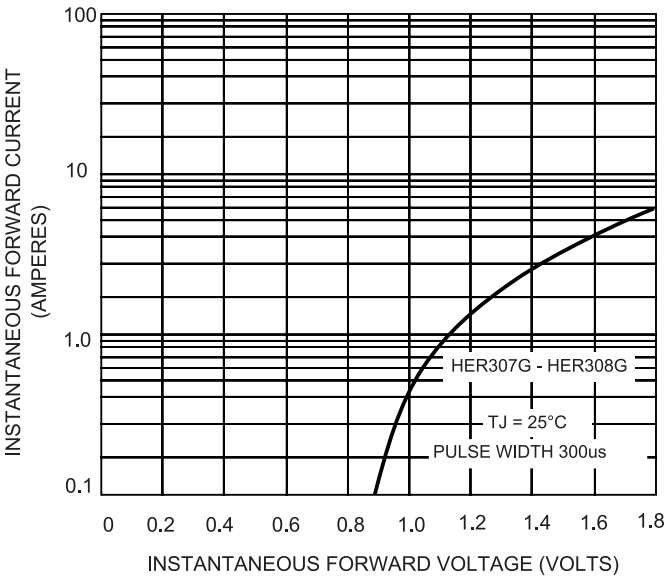


FIG.4-TYPICAL FORWARD CHARACTERISTICS



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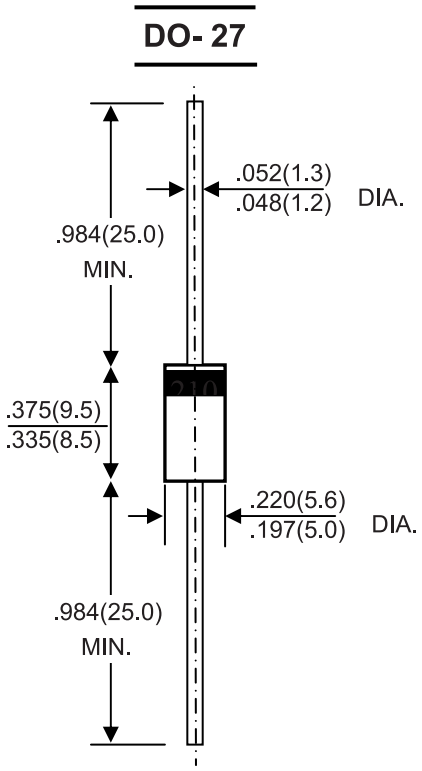
Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
High Efficiency Glass Passivated Rectifiers	HER307G
	HER308G