

RoHS Compliant



Features:

- · Low Forward Voltage Drop
- · High Current Capability
- High Reliability
- · High Surge Current Capability

Specifications:

Mechanical Data:

Case : Molded Plastic DO-41

Lead : Axial Leads, Solderable per MIL-STD-202, method 208 guaranteed

Polarity : Colour brand denotes cathode end

High temperature soldering guaranteed : 250°C/10 seconds/.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension

Weight : 0.34g

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%.

Parameters	Value	Units
Maximum Recurrent Peak Reverse Voltage	800	V
Maximum RMS Voltage	560	
Maximum DC Blocking Voltage	800	
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length @ T_A = 55°C	1	А
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	30	
Maximum Instantaneous Forward Voltage at 1A	1.7	V





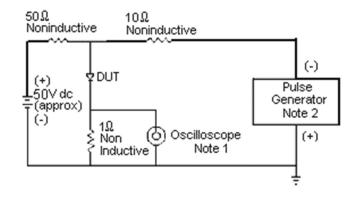
Parameters	Value	Units
Maximum DC Reverse Current at $T_A = 25^{\circ}C$ at Rated DC Blocking Voltage at $T_A = 125^{\circ}C$	5 100	μΑ μΑ
Maximum Reverse Recovery Time (Note 1)	75	nS
Typical Junction Capacitance (Note 2)	15	pF
Operating and Storage Temperature Range T _J , T _{STG}	-65 to +150	°C

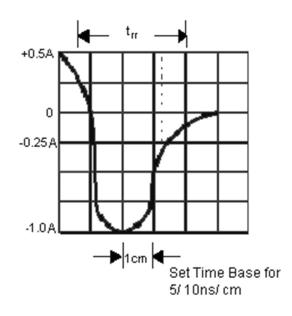
Notes:

- 1. Reverse Recovery Test Conditions: I_F = 0.5A, I_R = 1A, I_{RR} = 0.25A.
- 2. Measured at 1MHz and applied reverse voltage of 4V DC.

Ratings and Characteristic Curves

Figure 1 - Reverse Recovery Time Characteristics and Test Circuit Diagram





Notes:

- 1. Rise Time = 7ns Maxitmum. Input Impedance = $1M\Omega$ 22pf
- 2. Rise Time = 10ns Maximum Source Impedance = 50Ω



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Figure 2 - Maximum Average Forward Current Rating

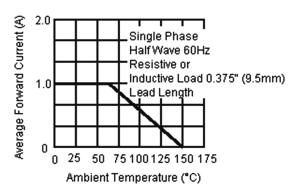


Figure 3 - Typical Reverse Characteristics

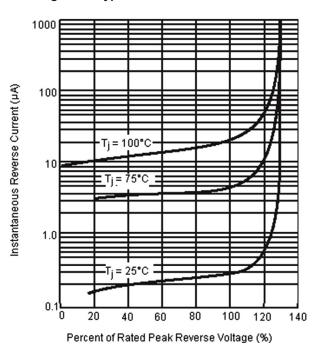


Figure 4 - Typical Forward Characteristics

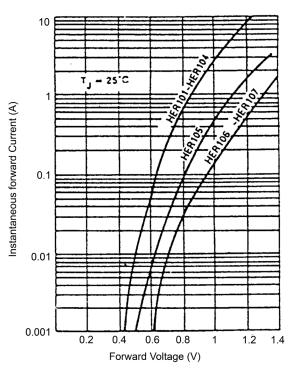
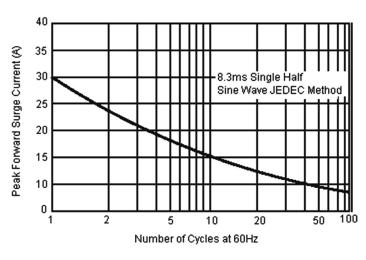


Figure 5 - Maximum Non-Repetitive Forward Surge Current

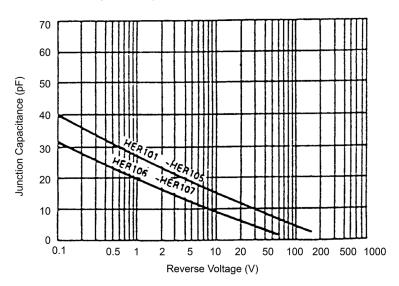


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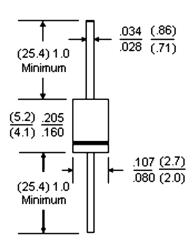




Figure 4 - Typical Junction Capacitance



DO-41



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number	
Diode, Fast, 1A, 800V	HER107	

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