



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 band 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	A
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

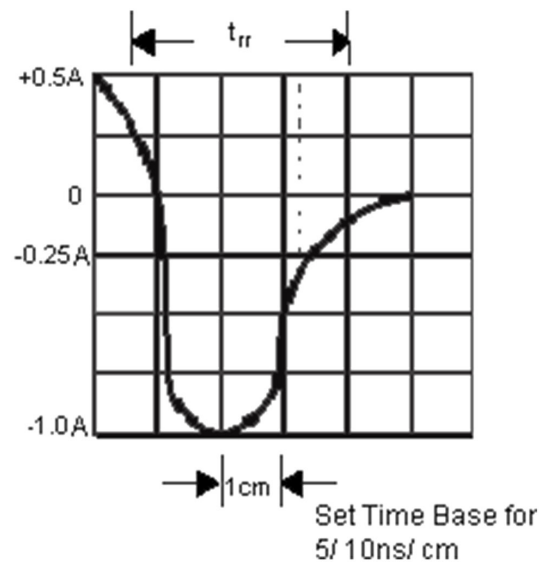
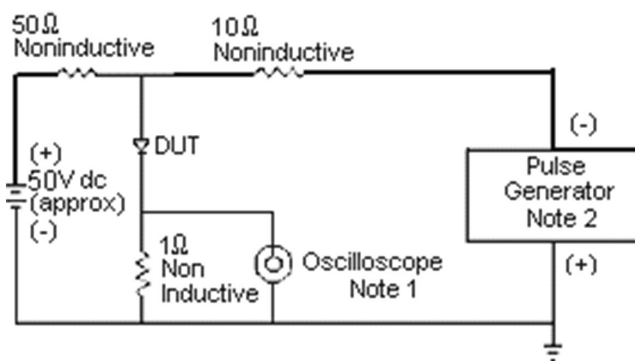
Parameters	Value	Units
Maximum DC Reverse Current at $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_A = 125^\circ\text{C}$	5 100	μA μA
Maximum Reverse Recovery Time (Note 1)	75	nS
Typical Junction Capacitance (Note 2)	15	pF
Operating and Storage Temperature Range T_J, T_{STG}	-65 to +150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

Notes:

- Reverse Recovery Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$.
- 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:

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

Figure 2 - Maximum Average Forward Current Rating

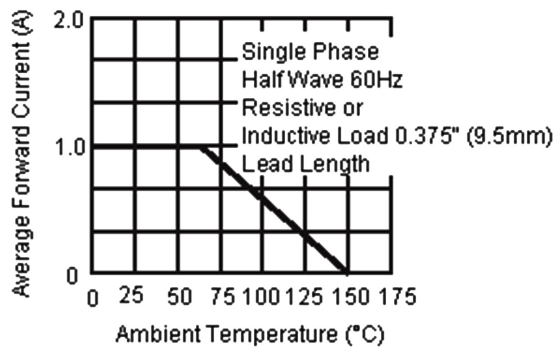


Figure 3 - Typical Reverse Characteristics

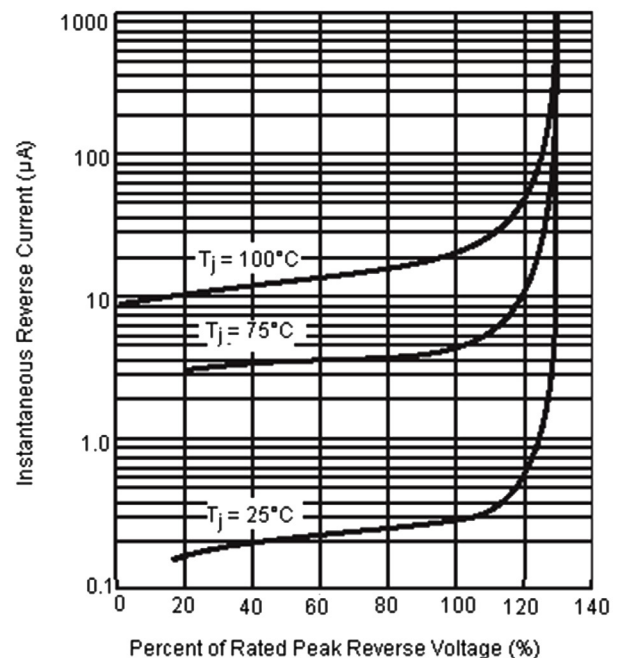


Figure 4 - Typical Forward Characteristics

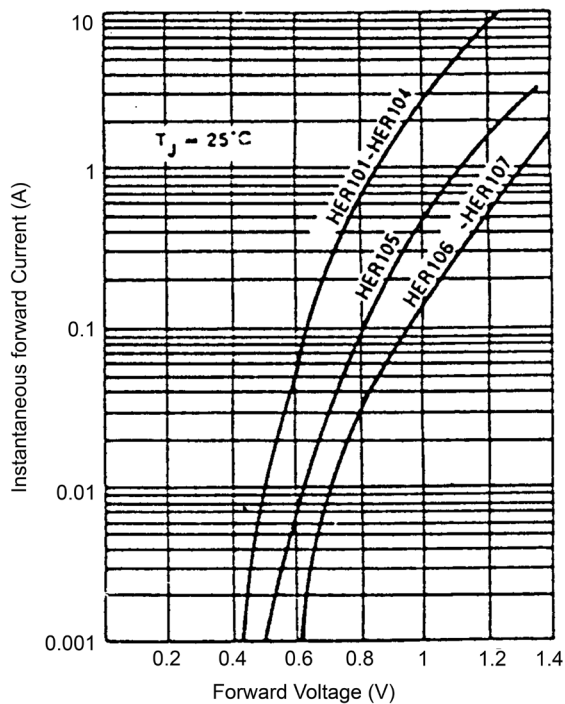


Figure 5 - Maximum Non-Repetitive Forward Surge Current

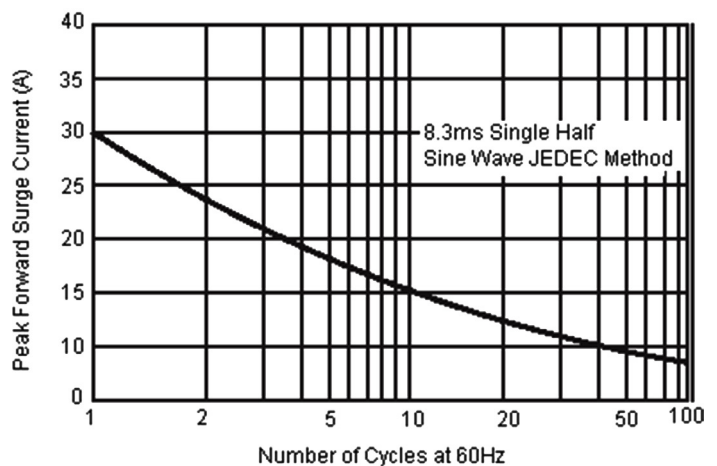
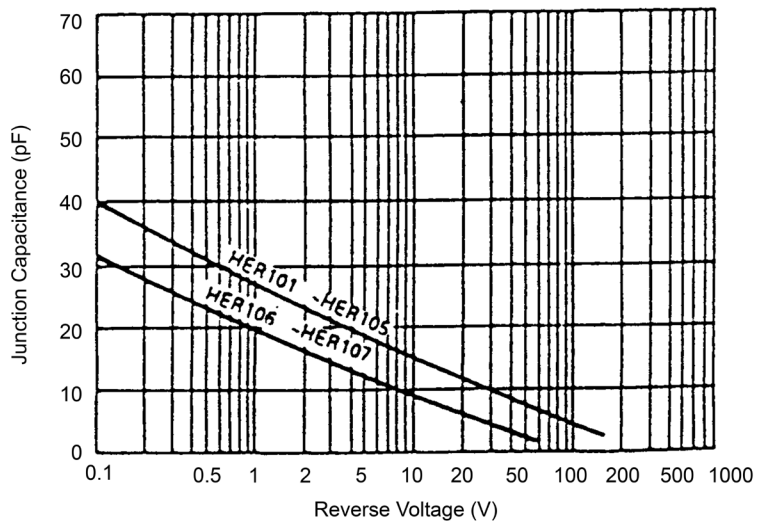
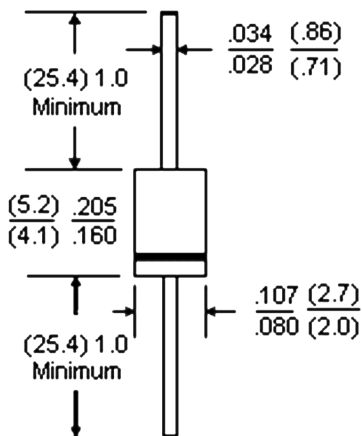


Figure 4 - Typical Junction Capacitance



DO-41



Dimensions : Inches (Millimetres)

Part Number Table

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

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