

General Purpose Rectifier, 1.0A

Features

- Diffused junction
- High efficiency
- Low forward voltage drop
- Low power loss
- High surge current capability

Mechanical Characteristics

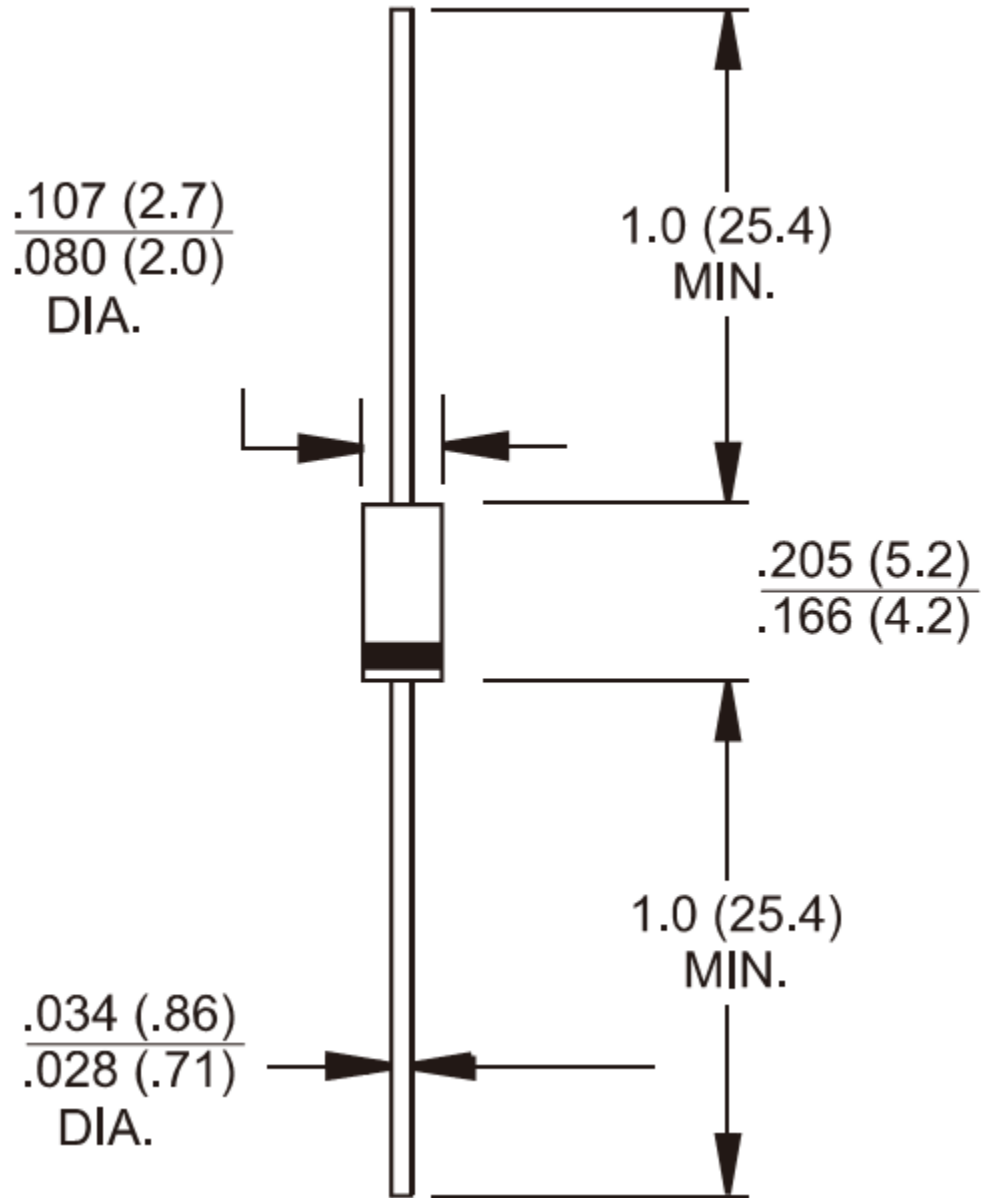
- Case: Molded Plastic
- Cathode indicated by Polarity band
- Mounting position: Any
- Terminals: Finish Tin plated, Solderable per MIL-STD-202, Method 208
- Weight: 0.33 grams (approx.)


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Maximum Ratings ($T_A = 25^{\circ}\text{C}$ unless otherwise specified)			
Parameter	Symbol	1N4007	Units
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum average forward output current @ $T_A = 50^{\circ}\text{C}$	$I_{F(AV)}$	1.0	A
Peak forward surge current (8.3ms) single half sine-wave superimposed on rated load	I_{FSM}	30	A

Electrical Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise specified)			
Parameters	Symbol	1N4007	Units
Maximum DC forward voltage drop @ 1.0A DC	V_F	1.0	V
Maximum DC reverse current @ rated DC blocking voltage	I_R	$T_A = 25^{\circ}\text{C}$	5.0
		$T_A = 100^{\circ}\text{C}$	50

Thermal and Mechanical Specifications ($T_A = 25^{\circ}\text{C}$ unless otherwise specified)			
Parameters	Symbol	Values	Units
Typical thermal resistance, junction to ambient	$R_{\theta JA}$	85	$^{\circ}\text{C}/\text{W}$
Operating and Storage temperature range	T_J, T_{Stg}	- 65 to + 150	$^{\circ}\text{C}$



Dimensions in inches and (millimeters)