



## Features:

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

## 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%.

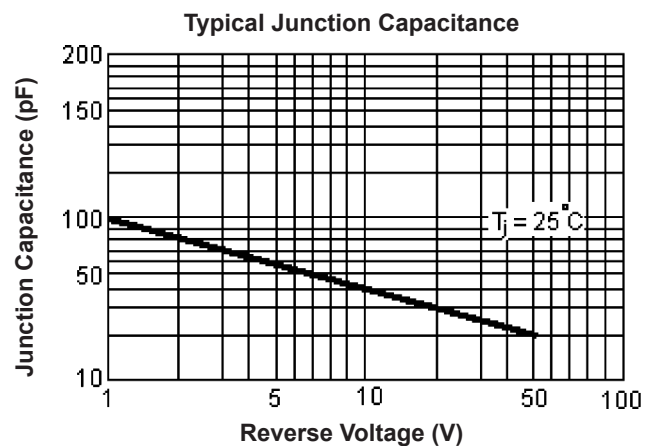
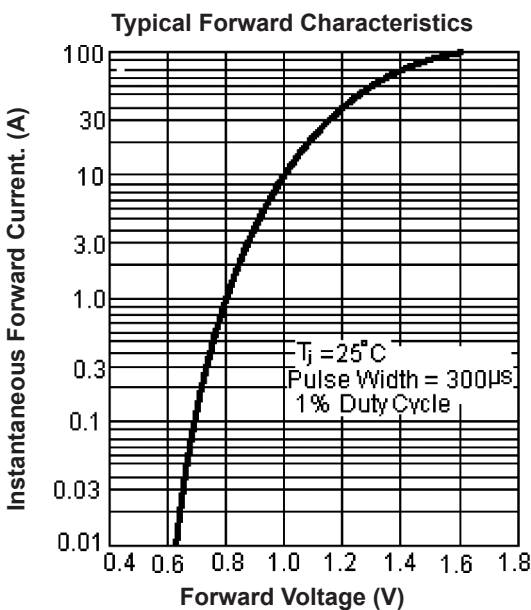
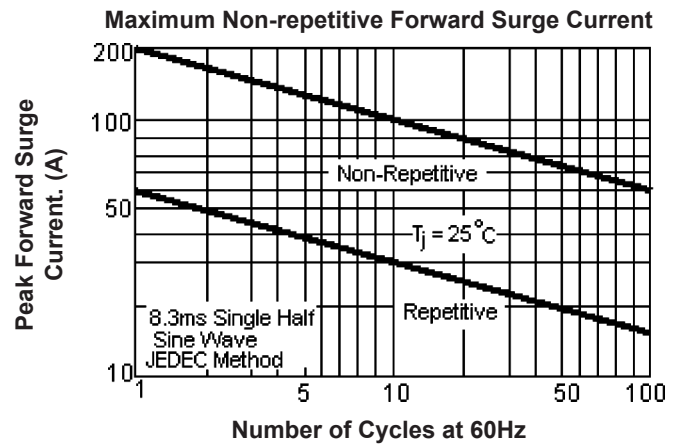
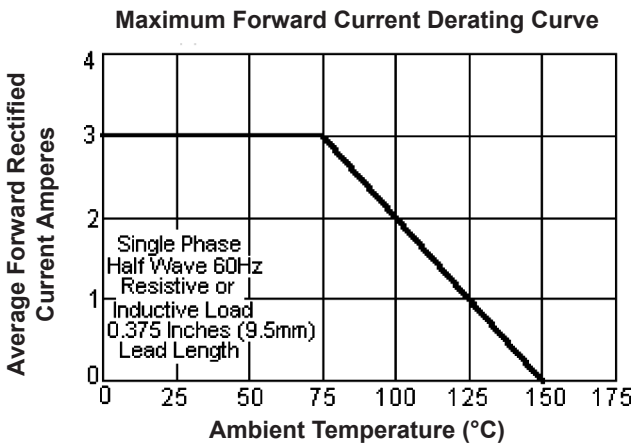
Type Number	Symbol	1N5407	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	800	V
Maximum RMS voltage	$V_{RMS}$	560	
Maximum DC blocking voltage	$V_{DC}$	800	
Maximum average forward rectified current 0.375 (9.5mm) lead length at $T_A = 75^\circ\text{C}$	$I_{(AV)}$	3	A
Peak forward surge current, 8.3ms Single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200	
Maximum instantaneous forward voltage at 3A	$V_F$	1	V
Maximum DC reverse current at $T_A = 25^\circ\text{C}$ at rated DC blocking voltage at $T_A = 100^\circ\text{C}$	$I_R$	5 100	$\mu\text{A}$
Maximum full load reverse current, full cycle average 0.375 inches (9.5mm) lead length at $T_L = 75^\circ\text{C}$	$HT_{IR}$	30	
Typical junction capacitance (note 1)	$C_j$	50	pF
Typical thermal resistance (note 2)	$R_{\theta JA}$	40	$^\circ\text{C}/\text{W}$
Operating temperature range	$T_J$	-65 to +150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$		
Typical junction capacitance (note 1)	$C_j$	50	pF
Typical thermal resistance (note 2)	$R_{\theta JA}$	40	$^\circ\text{C}/\text{W}$
Operating temperature range	$T_J$	-65 to +150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$		

- Notes:
1. Measured at 1MHz and applied reverse voltage of 4V DC.
  2. Mount on Cu-pad size 16 × 16mm on PCB.

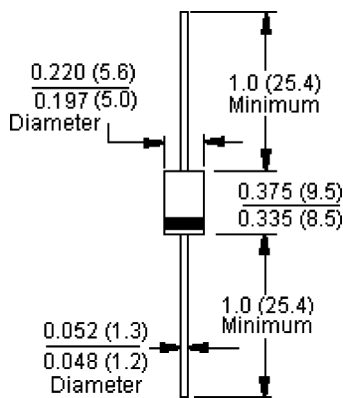
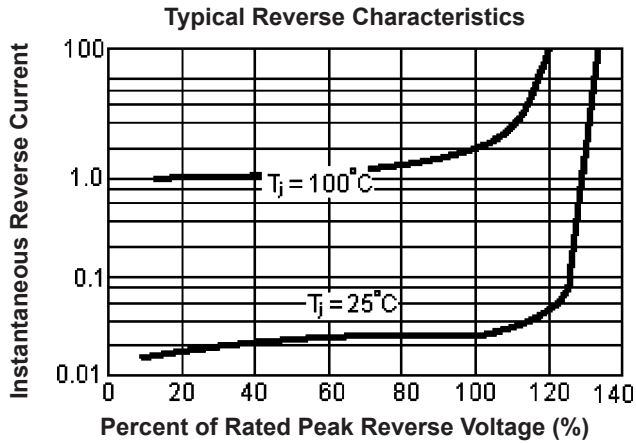
## Mechanical Data:

Cases : Moulded plastic  
 Lead : Axial leads, solderable per MIL-STD-202, Method 208 guaranteed  
 Polarity : Colour band denotes cathode end  
 High temperature soldering guaranteed : 260°C/10 seconds/0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension

## Ratings and Characteristics Curves:



## Ratings and Characteristics Curves:



Dimensions : Inches (Millimetres)

### Part Number Table

Description	Part Number
Diode, Standard, 3A, 800V	1N5407

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