

General Purpose Rectifiers



Features:

- Low forward voltage drop
- High current capability

Absolute Maximum Ratings* $T_A = 25^\circ\text{C}$ unless otherwise noted

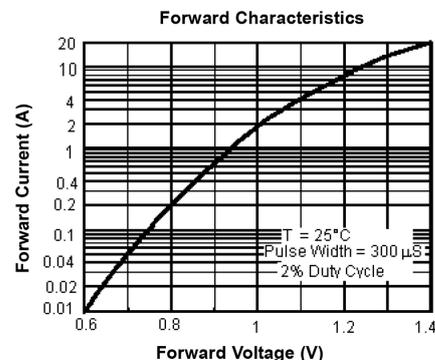
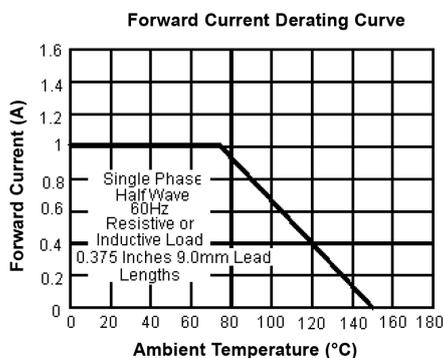
Parameter	Symbol	Value	Units
Average Rectified Current 0.375 Inches Lead Length at $T_A = 75^\circ\text{C}$	I_o	1	A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed on Rated Load (JEDEC Method)	i_f (surge)	30	
Total Device Dissipation Derate above 25°C	P_D	2.5 20	W mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	50	$^\circ\text{C}/\text{W}$
Storage Temperature Range	T_{STG}	-55 to +175	$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to +150	

*These Ratings are Limiting Values above Which the Serviceability of Any Semiconductor Device may be Impaired.

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

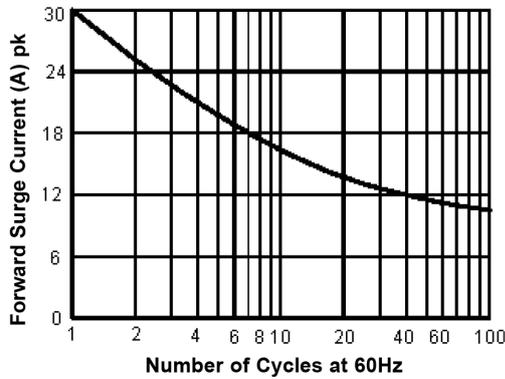
Parameter	Device						Unit
	4001+	4002+	4003+	4004+	4005+	4006+	
Peak Repetitive Reverse Voltage	50	100	200	400	600	1,000	V
Maximum RMS Voltage	35	70	140	280	420	700	
DC Reverse Voltage (Rated V_R)	50	100	200	400	600	1,000	
Maximum Reverse Current at Rated V_R $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	5 500						μA
Maximum Forward Voltage at 1A	1.1						V
Maximum Full Load Reverse Current, Full Cycle $T_A = 75^\circ\text{C}$	30						μA
Typical Junction Capacitance $V_R = 4\text{V}$, $f = 1\text{ MHz}$	15						pF

Typical Characteristics

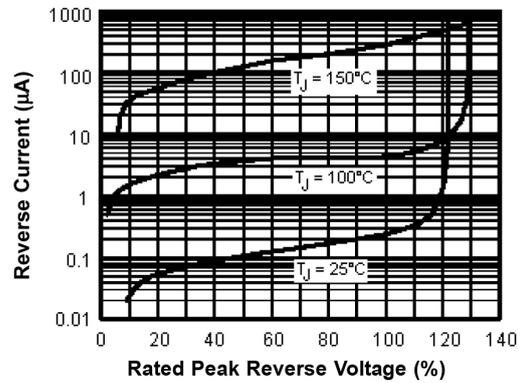


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Non-Repetitive Surge Current

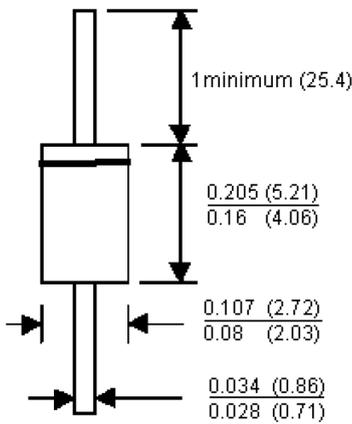


Reverse Characteristics



Dimensions:

DO-41



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Diode, Standard, 1A, 50V	1N4001+
Diode, Standard, 1A, 100V	1N4002+
Diode, Standard, 1A, 200V	1N4003+
Diode, Standard, 1A, 400V	1N4004+
Diode, Standard, 1A, 600V	1N4005+
Diode, Standard, 1A, 800V	1N4006+

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