

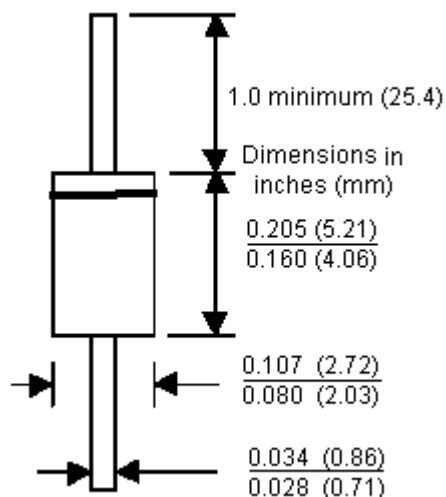
General Purpose Rectifiers



Features:

- Low forward voltage drop.
- High current capability.

DO-41



Colour Band Denotes Cathode

Dimensions : Millimetres (Inches)

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	1.0	A
Peak Forward Surge Current 8.3ms 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	$^\circ\text{C/W}$
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.

General Purpose Rectifiers

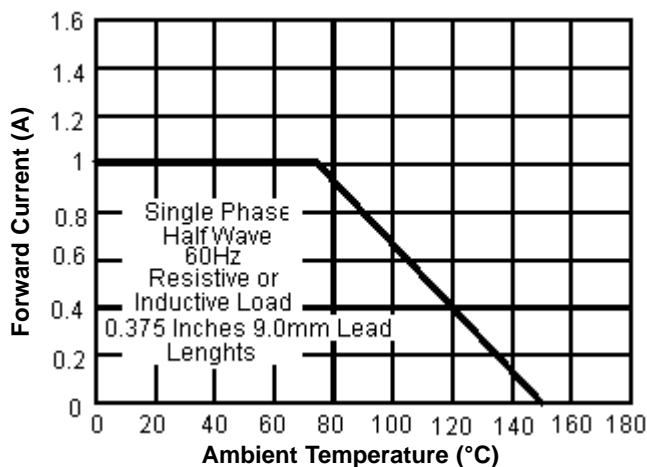


Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

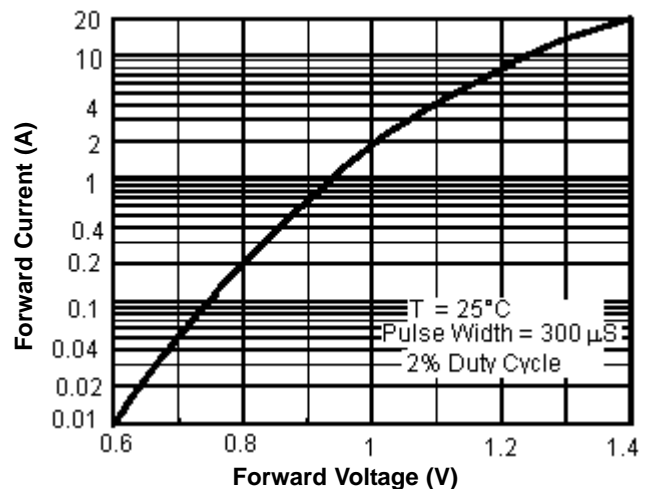
Parameter	Device					Unit
	4001	4002	4003	4005	4006	
Peak Repetitive Reverse Voltage	50	100	200	600	1000	V
Maximum RMS Voltage	35	70	140	420	700	
DC Reverse Voltage (Rated V_R)	50	100	200	600	1000	
Maximum Reverse Current at Rated V_R $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	5.0 500					μA
Maximum Forward Voltage at 1.0A	1.1					V
Maximum Full Load Reverse Current, Full Cycle $T_A = 75^\circ\text{C}$	30					μA
Typical Junction Capacitance $V_R = 4.0\text{V}$, $f = 1.0\text{MHz}$	15					pF

Typical Characteristics

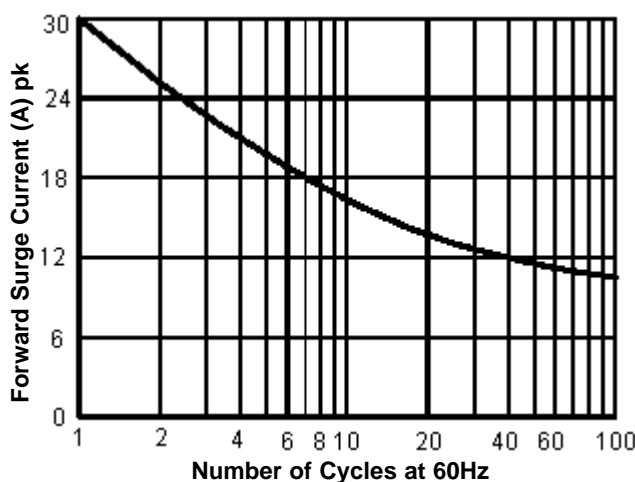
Forward Current Derating Curve



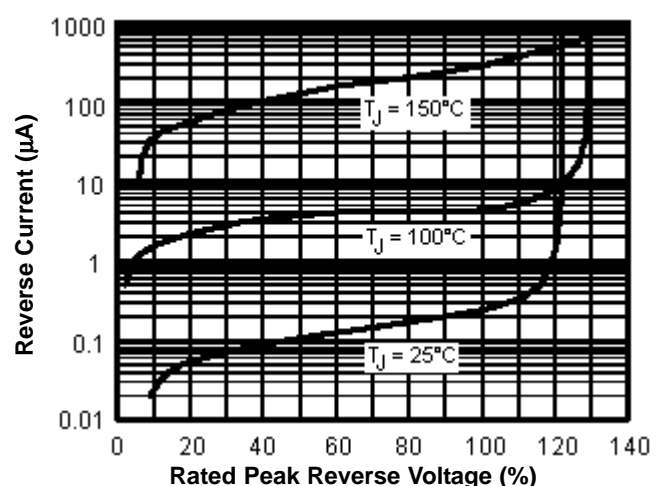
Forward Characteristics



Non-Repetitive Surge Current



Reverse Characteristics



General Purpose Rectifiers



Part Number Table

Description	Part Number
Diode, 1A, 50V Reel 5K	1N4001 R0
Diode, 1A, 100V Reel 5K	1N4002 R0
Diode, 1A, 200V Reel 5K	1N4003 R0
Diode, 1A, 800V Reel 5K	1N4006 R0
Diode, Standard, 1A, 50V	1N4001
Diode, Standard, 1A, 100V	1N5402
Diode, Standard, 1A, 200V	1N4003
Diode, Standard, 1A, 600V	1N4005
Diode, Standard, 1A, 800V	1N4006

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