

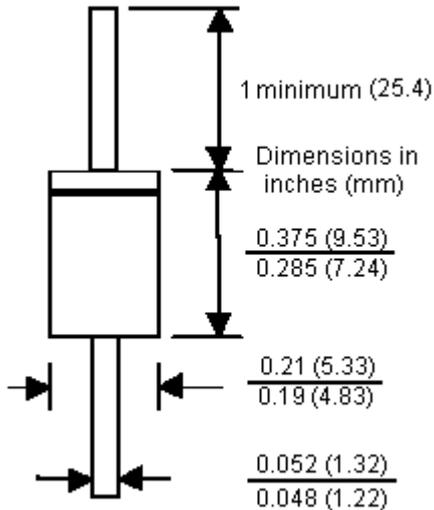
General Purpose Rectifiers



DO-201AD

Features:

- 3 amperes operation at $T_A = 75^\circ\text{C}$ with no thermal runaway
- High current capability
- Low leakage



Colour Band Denotes Cathode

Dimensions : Inches (Millimetres)

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	3	A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed on Rated Load (JEDEC Method)	i_f (surge)	200	
Total Device Dissipation Derate above 25°C	P_D	6.25 50	W mW/ $^\circ\text{C}$
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	20	$^\circ\text{C}/\text{W}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Operating Junction Temperature	T_J		

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

General Purpose Rectifiers

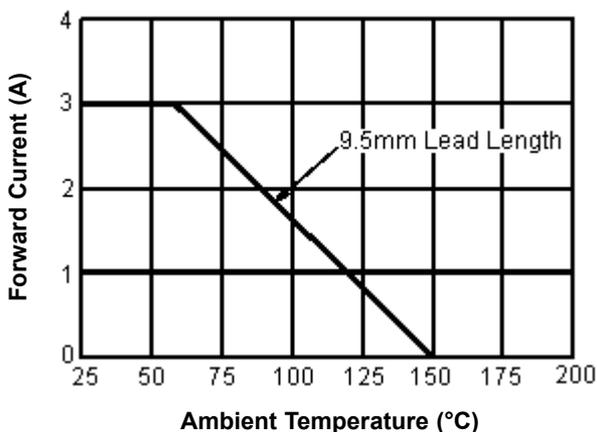


Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

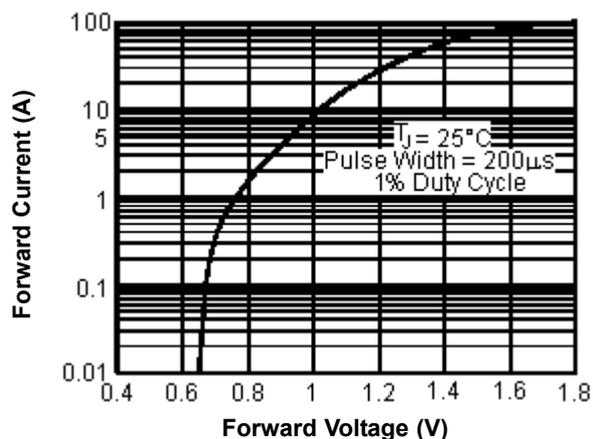
Parameter	Device					Unit
	5401	5402	5404	5406	5408	
Peak Repetitive Reverse Voltage	100	200	400	600	1000	V
Maximum RMS Voltage	70	140	280	420	700	
DC Reverse Voltage (Rated V_R)	100	200	400	600	1000	
Maximum Reverse Current at Rated V_R $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	5 500					μA
Maximum Forward Voltage at 3 A	1.2					V
Maximum Full Load Reverse Current, Full Cycle $T_A = 105^\circ\text{C}$	0.5					mA
Typical Junction Capacitance $V_R = 4\text{ V}$, $f = 1\text{ MHz}$	30					pF

Typical Characteristics

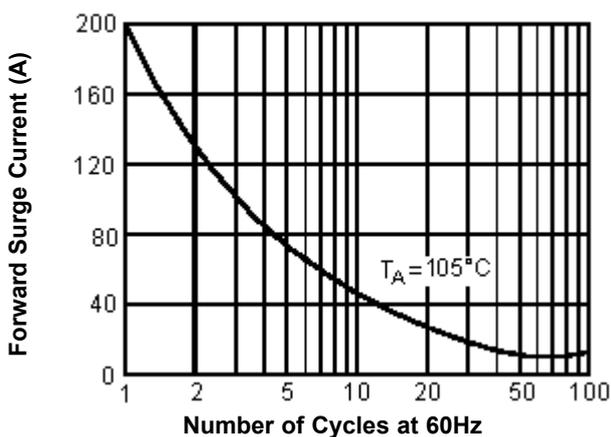
Forward Current Derating Curve



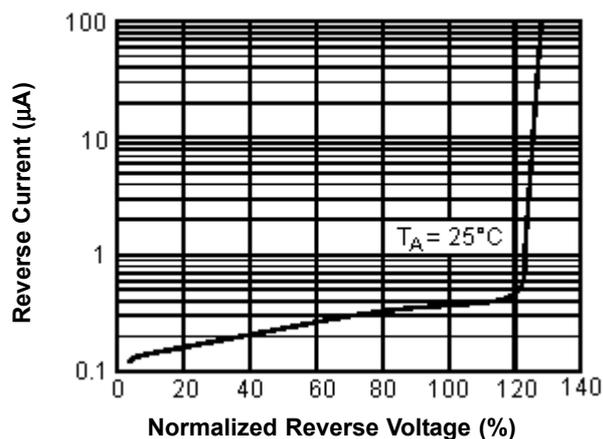
Forward Characteristics



Overload Surge Current



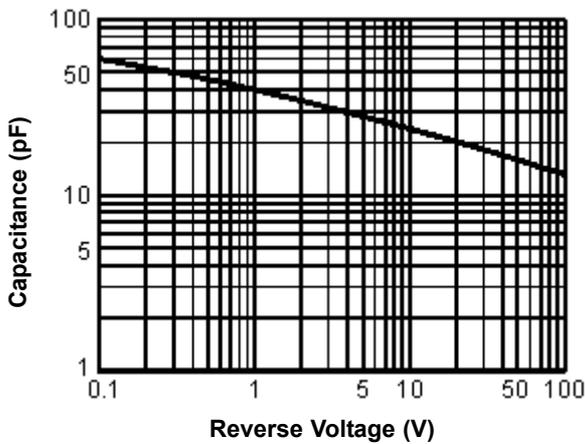
Reverse Characteristics



General Purpose Rectifiers



Junction Capacitance



Part Number Table

Description	Part Number
Diode, 3 A, 100 V Reel 1250	1N5401 R0
Diode, 3 A, 400 V Reel 1250	1N5404 R0
Diode, 3 A, 600 V Reel 1250	1N5406 R0
Diode, 3 A, 1,000 V Reel 1250	1N5408 R0
Diode, Standard, 3 A, 100 V	1N5401
Diode, Standard, 3 A, 200 V	1N5402
Diode, Standard, 3 A, 400 V	1N5404
Diode, Standard, 3 A, 600 V	1N5406
Diode, Standard, 3 A, 1,000 V	1N5408

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