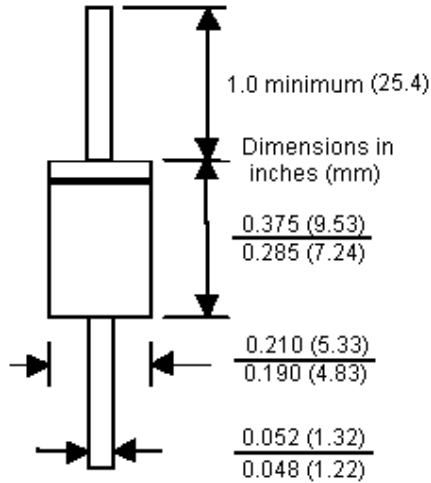


General Purpose Rectifiers



DO-201AD



Colour Band Denotes Cathode

Dimensions : Millimetres (Inches)

Features:

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

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	3.0	A
Peak Forward Surge Current 8.3ms 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

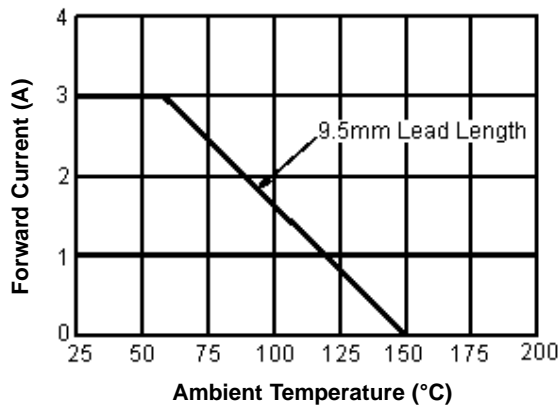


Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

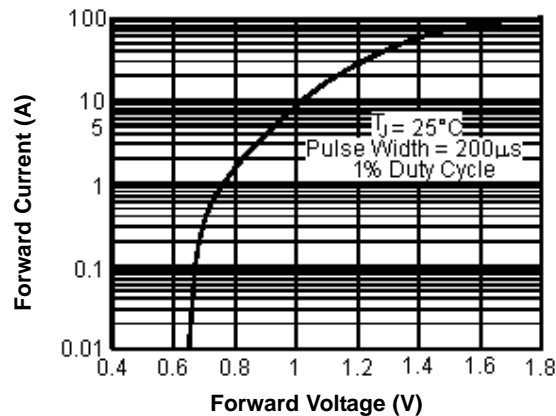
Parameter	Device					Unit
	5401	5402	5404	5406	5408	
Peak Repetitive Reverse Voltage	100	200	400	600	1000	V
Maximum RMS Voltage	70	140	280	420	700	
DC Reverse Voltage (Rated V_R)	100	200	400	600	1000	
Maximum Reverse Current at Rated V_R $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	5.0 500					μA
Maximum Forward Voltage at 3.0A	1.2					V
Maximum Full Load Reverse Current, Full Cycle $T_A = 105^\circ\text{C}$	0.5					mA
Typical Junction Capacitance $V_R = 4.0\text{V}$, $f = 1.0\text{MHz}$	30					pF

Typical Characteristics

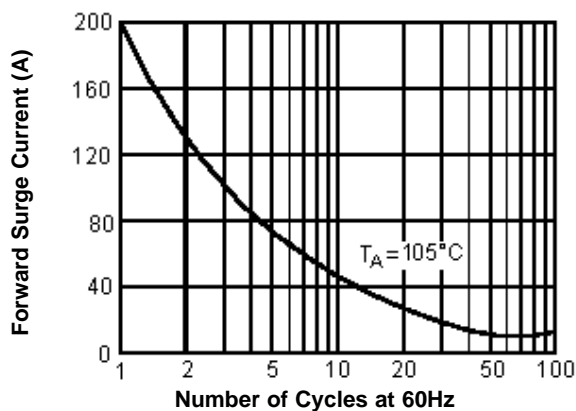
Forward Current Derating Curve



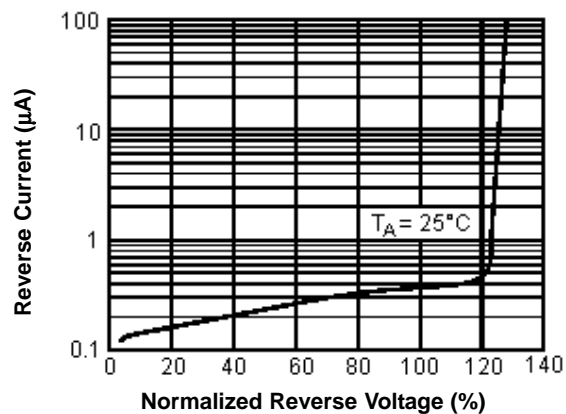
Forward Characteristics



Overload Surge Current



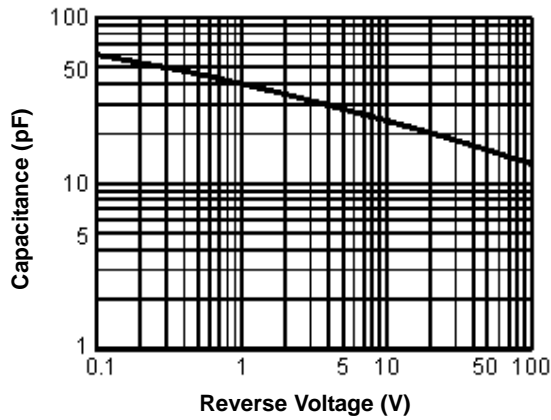
Reverse Characteristics



General Purpose Rectifiers



Junction Capacitance



Part Number Table

Description	Part Number
Diode, 3A, 100V Reel 1250	1N5401 R0
Diode, 3A, 400V Reel 1250	1N5404 R0
Diode, 3A, 600V Reel 1250	1N5406 R0
Diode, 3A, 1000V Reel 1250	1N5408 R0
Diode, Standard, 3A, 100V	1N5401
Diode, Standard, 3A, 200V	1N5402
Diode, Standard, 3A, 400V	1N5404
Diode, Standard, 3A, 600V	1N5406
Diode, Standard, 3A, 1000V	1N5408

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