

General Purpose Rectifiers



Features

- 3 amperes 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	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.

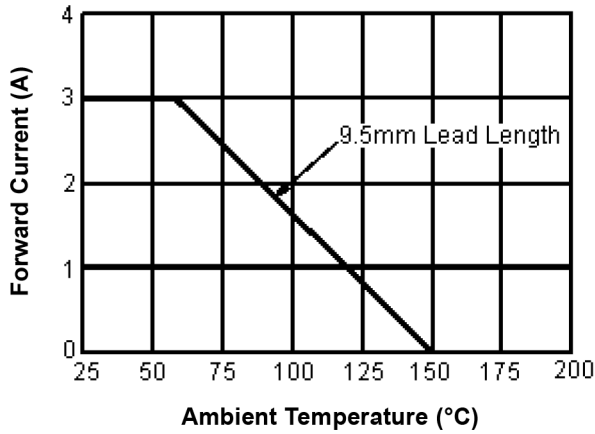
Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	1N5401+	1N5402+	1N5404+	1N5406+	1N5408+	Units
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
Max. 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

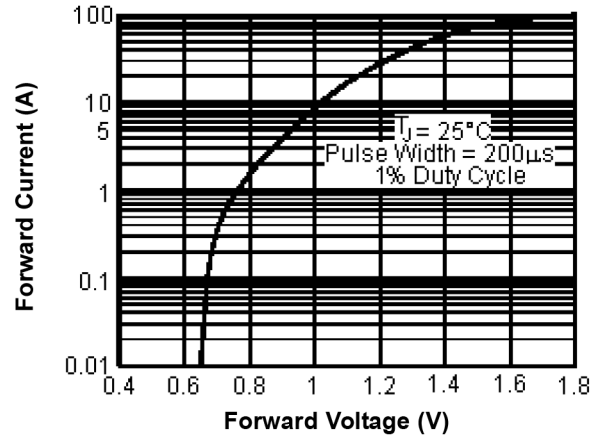
General Purpose Rectifiers

Ratings and Characteristic Curves

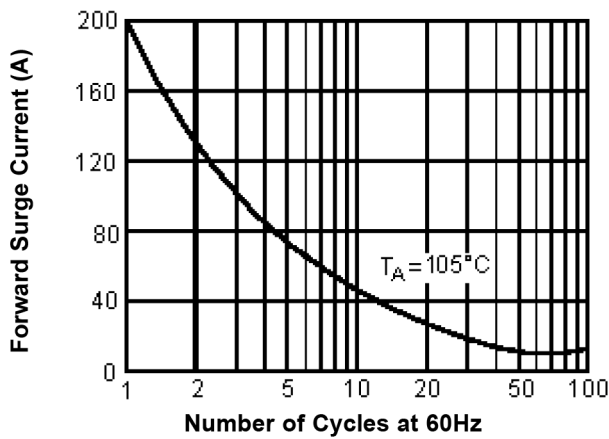
Forward Current Derating Curve



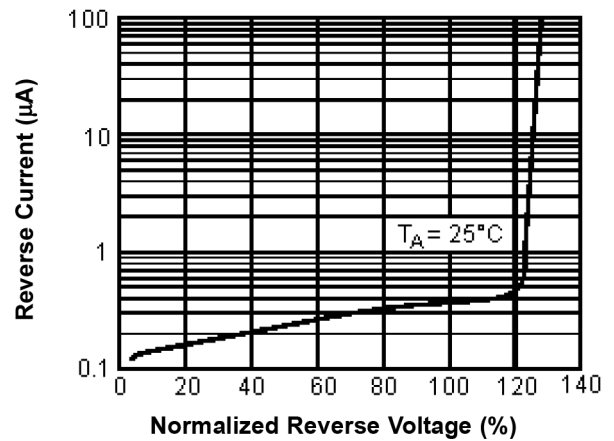
Forward Characteristics



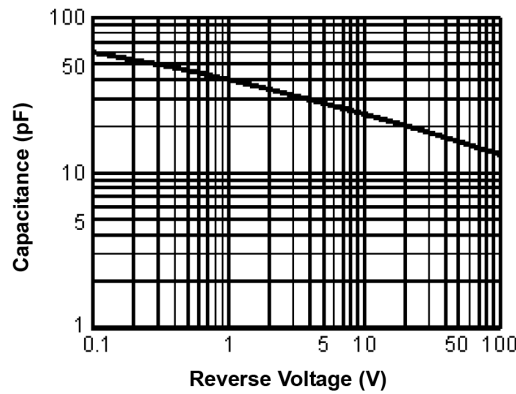
Overload Surge Current



Reverse Characteristics



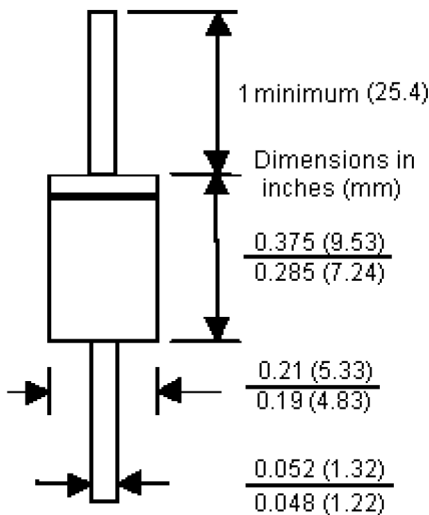
Junction Capacitance



General Purpose Rectifiers

Dimensions:

DO-201AD



Colour Band Denotes Cathode

Dimensions : Inches (Millimetres)

Part Number Table

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

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell Limited 2016.

www.element14.com
www.farnell.com
www.newark.com

