



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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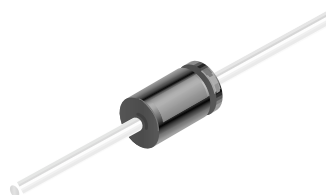
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# 1N4001 - 1N4007

## Features

- Low forward voltage drop.
- High surge current capability.



**DO-41**  
COLOR BAND DENOTES CATHODE

## General Purpose Rectifiers

### Absolute Maximum Ratings\* T<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value							Units
		4001	4002	4003	4004	4005	4006	4007	
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
I <sub>F(AV)</sub>	Average Rectified Forward Current, .375" lead length @ T <sub>A</sub> = 75°C	1.0							A
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	30							A
T <sub>stg</sub>	Storage Temperature Range	-55 to +175							°C
T <sub>J</sub>	Operating Junction Temperature	-55 to +175							°C

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### Thermal Characteristics

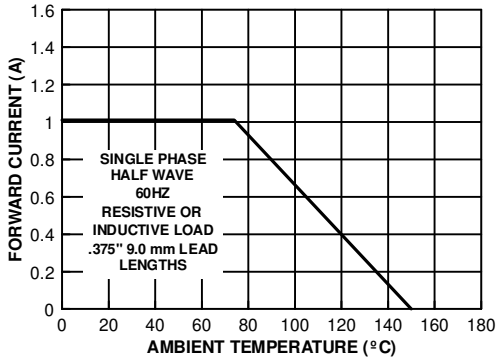
Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	3.0	W
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	50	°C/W

### Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

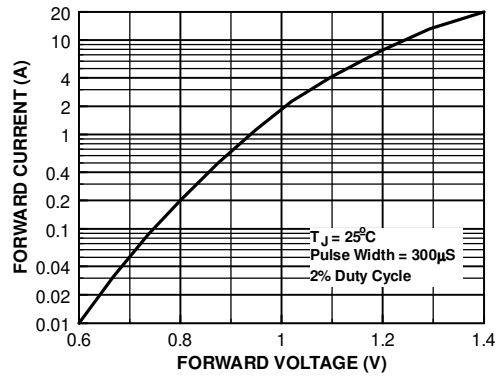
Symbol	Parameter	Device							Units
		4001	4002	4003	4004	4005	4006	4007	
V <sub>F</sub>	Forward Voltage @ 1.0 A	1.1							V
I <sub>rr</sub>	Maximum Full Load Reverse Current, Full Cycle T <sub>A</sub> = 75°C	30							μA
I <sub>R</sub>	Reverse Current @ rated V <sub>R</sub> T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	5.0 500							μA μA
C <sub>T</sub>	Total Capacitance V <sub>R</sub> = 4.0 V, f = 1.0 MHz	15							pF

Typical Characteristics

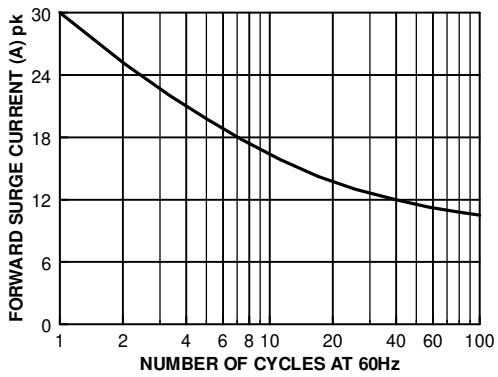
Forward Current Derating Curve



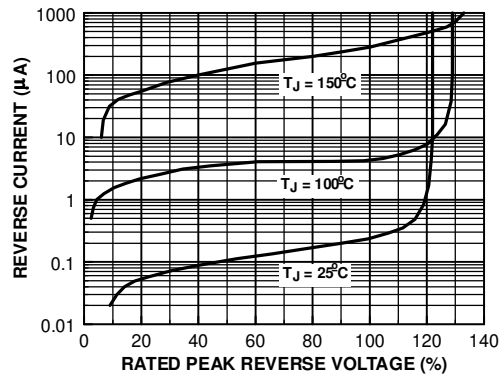
Forward Characteristics



Non-Repetitive Surge Current



Reverse Characteristics



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CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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E <sup>2</sup> CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	µC™	OCX™	RapidConfigure™	UHC™
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