



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!



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## 1N4001-G Thru. 1N4007-G

Voltage: 50 to 1000 V

Current: 1.0 A

RoHS Device

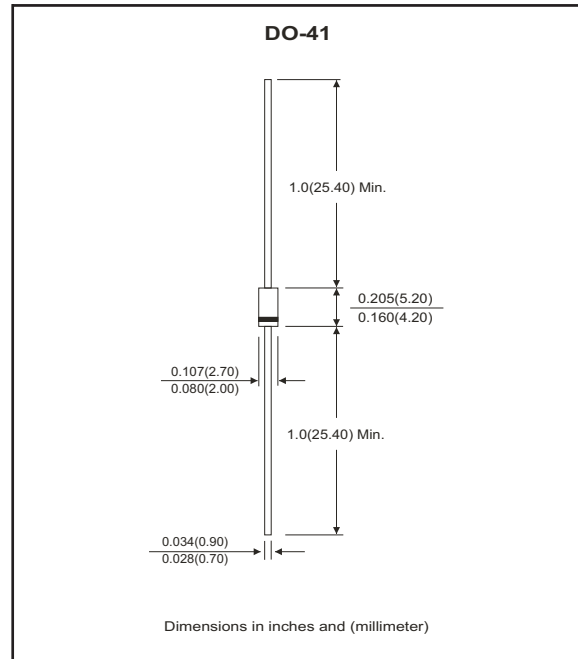


### Features

- Low cost construction.
- Fast forward voltage drop.
- Low reverse leakage.
- High forward surge current capability.
- High soldering temperature guarantee: 260 °C/10 seconds, 0.375"(9.5mm) lead length at 5lbs(2.3kg) tension.

### Mechanical data

- Case: transfer molded plastic, DO-41
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Indicated by cathode band
- Lead: Plated axial lead, solderable per MIL-STD-202E, method 208C
- Mounting position: Any
- Weight: 0.012ounce, 0.33 grams



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

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load derate current by 20%.

Parameter	Symbol	1N4001 -G	1N4002 -G	1N4003 -G	1N4004 -G	1N4005 -G	1N4006 -G	1N4007 -G	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length @T <sub>A</sub> =55 °C	I <sub(av)< sub=""></sub(av)<>	1.0							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30							A
Maximum Instantaneous Forward Voltage @1.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking voltage per element	I <sub>R</sub>	T <sub>A</sub> =25 °C							μA
		T <sub>A</sub> =100 °C							
Maximum Full Load Reverse Current,full cycle average 0.375"(9.5mm)lead length at T <sub>L</sub> =75 °C	I <sub>R(AV)</sub>	30							μA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	15							pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	60							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 ~ +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150							°C

NOTES:

1. Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
2. Thermal Resistance from junction to terminal 6.0mm<sup>2</sup> copper pads to each terminal.

## Rating and Characteristic Curves ( 1N4001-G Thru. 1N4007-G )

Fig.1 Typical Forward Current Derating Curve

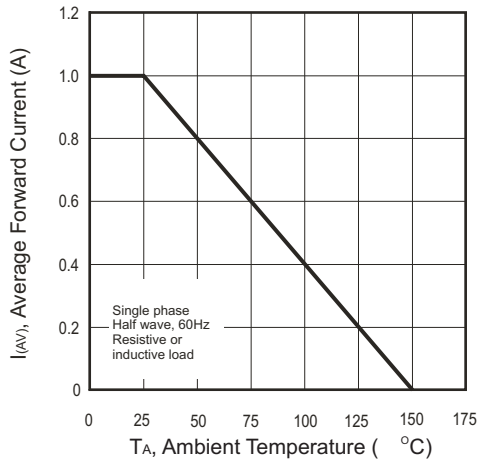


Fig.2 Maximum. Non-Repetitive Peak Forward Surge Current

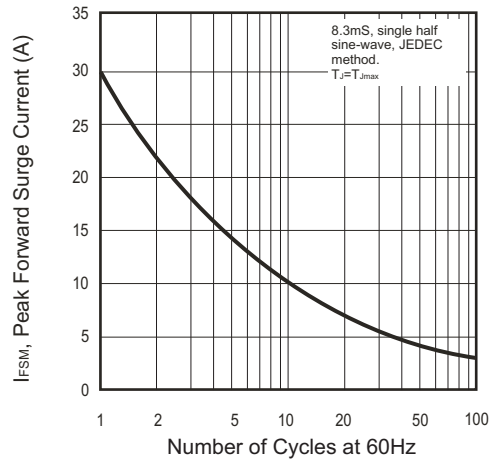


Fig.3 Typical Instantaneous Forward Characteristics

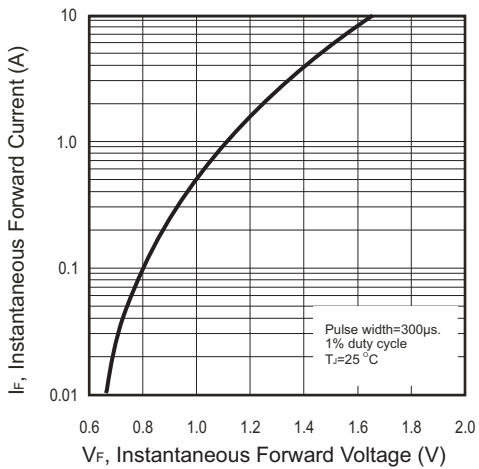


Fig.4 Typical Reverse Characteristics

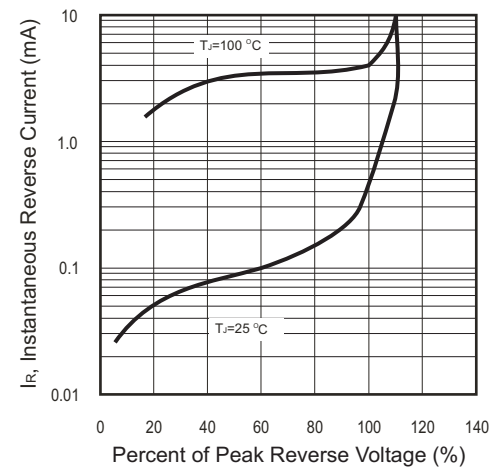


Fig.5 Typical Junction Capacitance

