THE DATASHEET OF

1N4004-G

1N4001-G Thru. 1N4007-G

Voltage: 50 to 1000 V
Current: 1.0 A
RoHS Device

Features

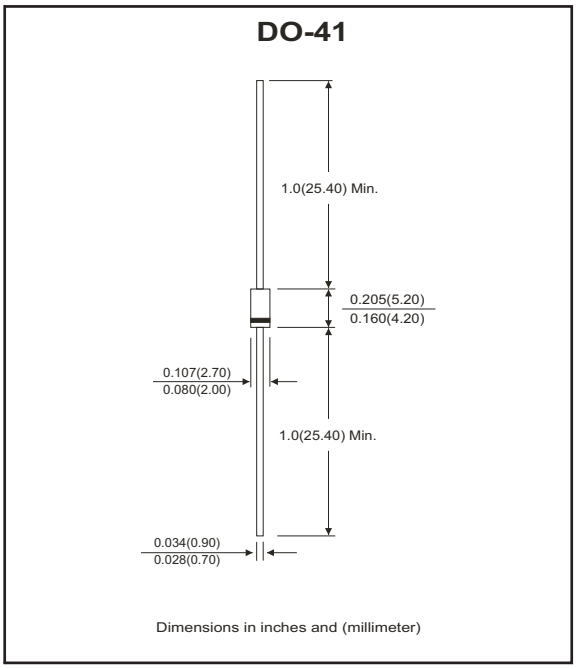
-Low cost construction.

-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 TA=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_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length @T_A=55 °C	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage @1.0A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking voltage per element T_A=25 °C	I_R	5.0							μA
T_A=100 °C		50							
Maximum Full Load Reverse Current,full cycle average 0.375”(9.5mm)lead length at T_L=75 °C	$I_{R(AV)}$	30							μA
Typical Junction Capacitance (Note 1)	C_J	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	60							°C/W
Operating Temperature Range	T_J	-55 ~ +150							°C
Storage Ttemperature Range	T_{STG}	-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^{2}copper pads to each terminal.

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

Fig.1 Typical Forward Current Derating Curve

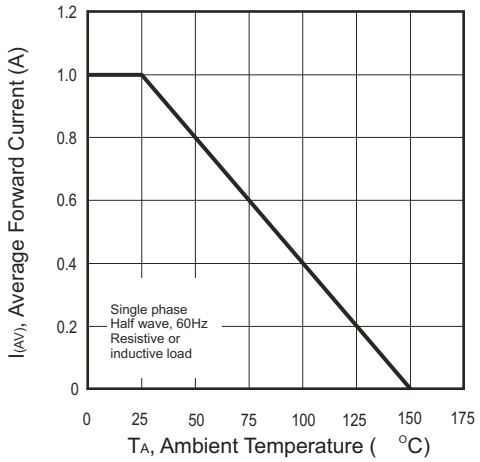


Fig.2 Maximum. Non-Repetitive Peak Forward Surge Current

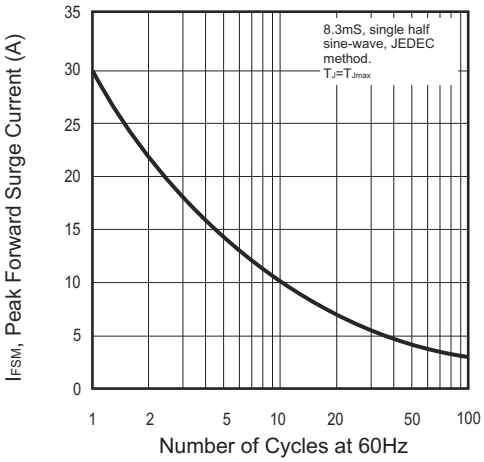


Fig.3 Typical Instantaneous Forward Characteristics

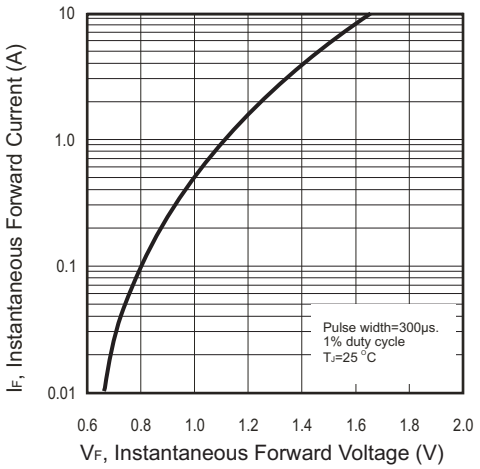


Fig.4 Typical Reverse Characteristics

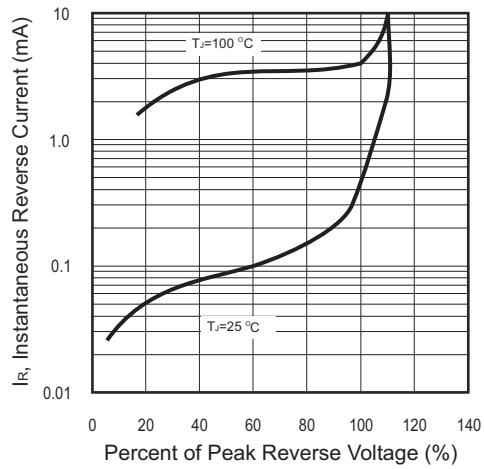
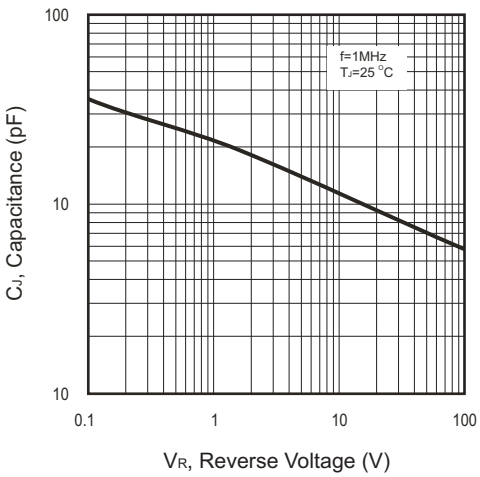


Fig.5 Typical Junction Capacitance



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View 1N4004-G on WIN SOURCE
- Comchip Technology Information

Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management