

1N4001G~1N4007G

Rev.C May.-2026

/ Descriptions

50V~1000V 1.0A DO-41
General purpose silicon rectifier Reverse Voltage 50 to1000V Forward Current 1.0A DO-41 axial package.

/ Features

Plated axial lead, Low reverse leakage, High forward surge current capability.

/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



PIN1 Cathode PIN2:Anode

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating							Unit
		1N4001G	1N4002G	1N4003G	1N4004G	1N4005G	1N4006G	1N4007G	
Maximum Recurrent 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 at $T_A=75^\circ\text{C}$	$I_{F\text{ AV}}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							A
Typical Junction Capacitance ¹	C_j	15.0							pF
Typical Thermal Resistance ²⁾	$R_{\theta JA}$	50.0							/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							

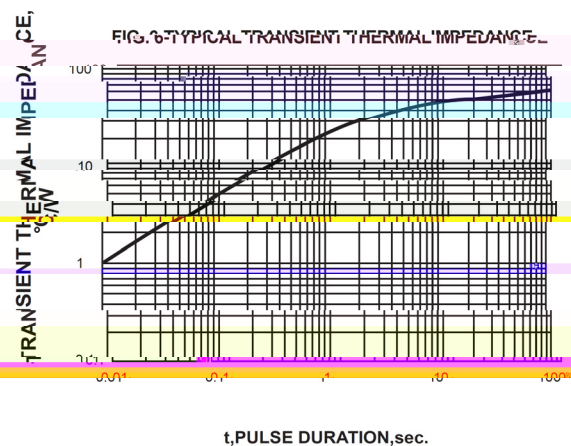
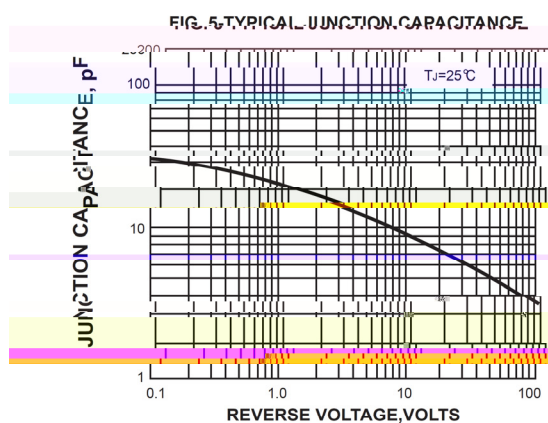
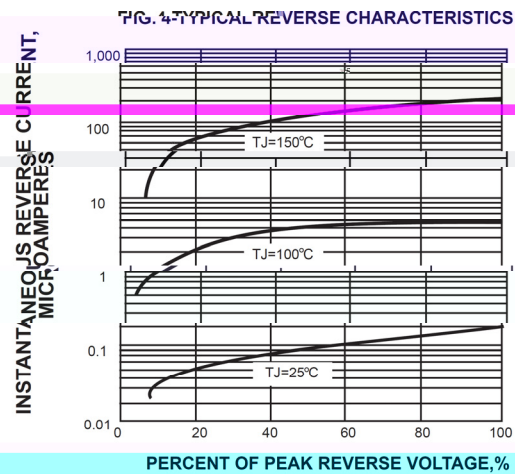
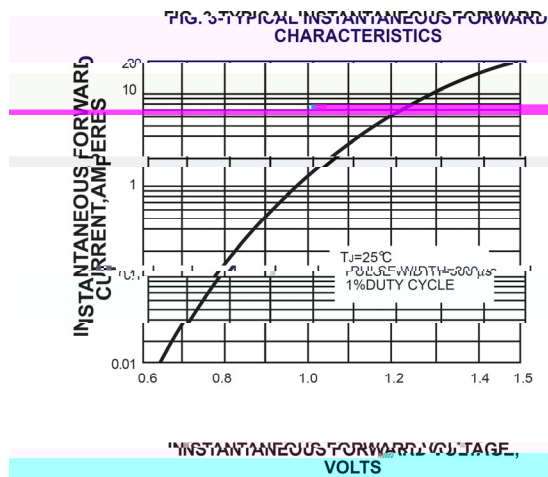
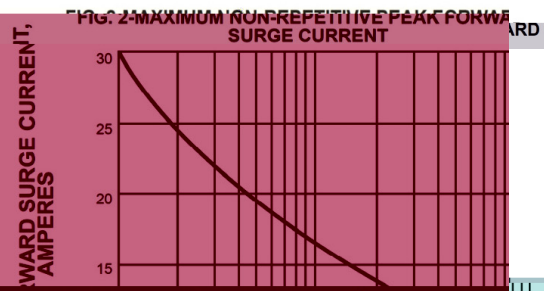
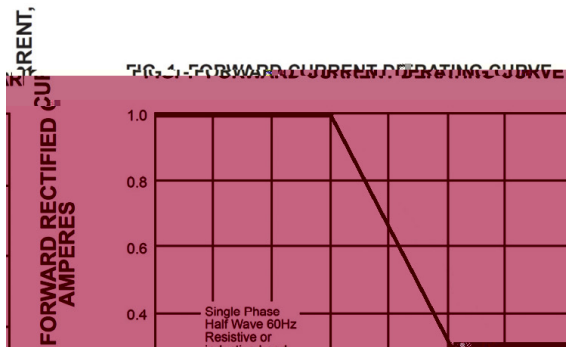
Note:

- 1) Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2) Thermal resistance from junction to ambient at 0.375" (9.5mm)lead length,P.C.B. mounted.

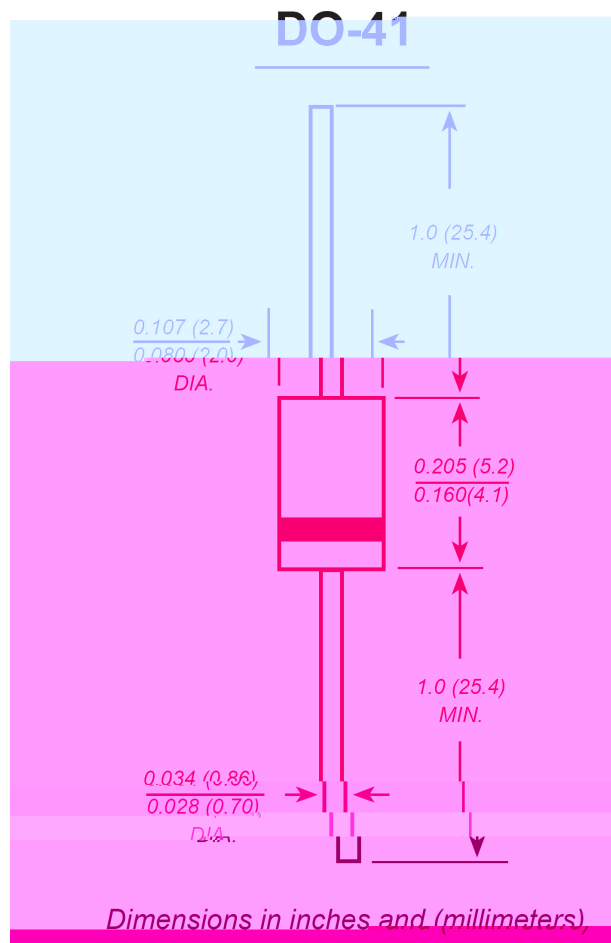
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating							Unit
			1N4001G	1N4002G	1N4003G	1N4004G	1N4005G	1N4006G	1N4007G	
Maximum Instantaneous Forward Voltage	V_F	$I_F=1.0\text{A}$	1.1							V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	$T_A=25$	5.0							μA
		$T_A=125$	50.0							μA

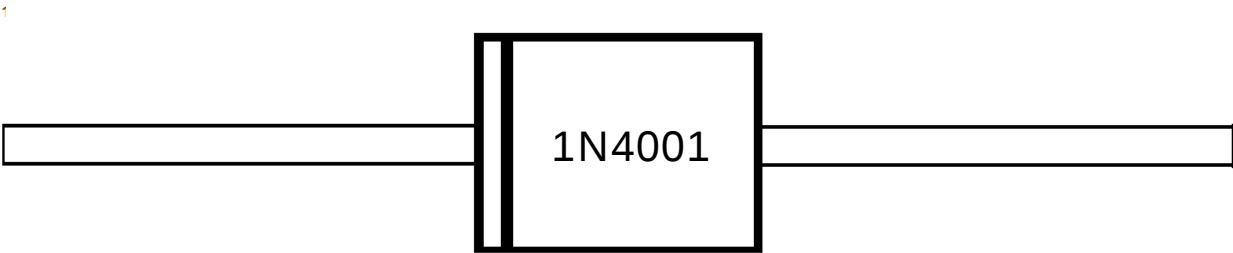
Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



1N4001

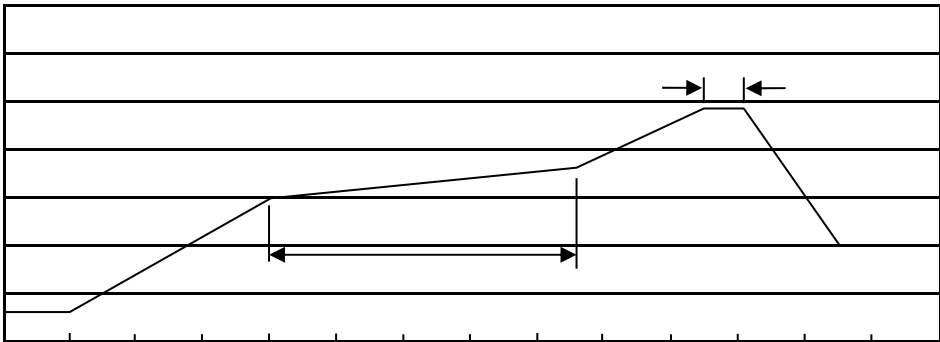
Note:

1N4001 Product Type Code

Marking

Type number	Marking code
1N4001G	1N4001
1N4002G	1N4002
1N4003G	1N4003
1N4004G	1N4004
1N4005G	1N4005
1N4006G	1N4006
1N4007G	1N4007

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245±5

5±0.5sec;

2.Peak Temp.:245±5 , Duration:5±0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
DO-41	3,000	1	3,000	10	30,000	7 ×6	262×72×90	425×270×200

/ Notices