

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

Voltage: 50 to 1000 V

Current: 1.0 A

RoHS Device

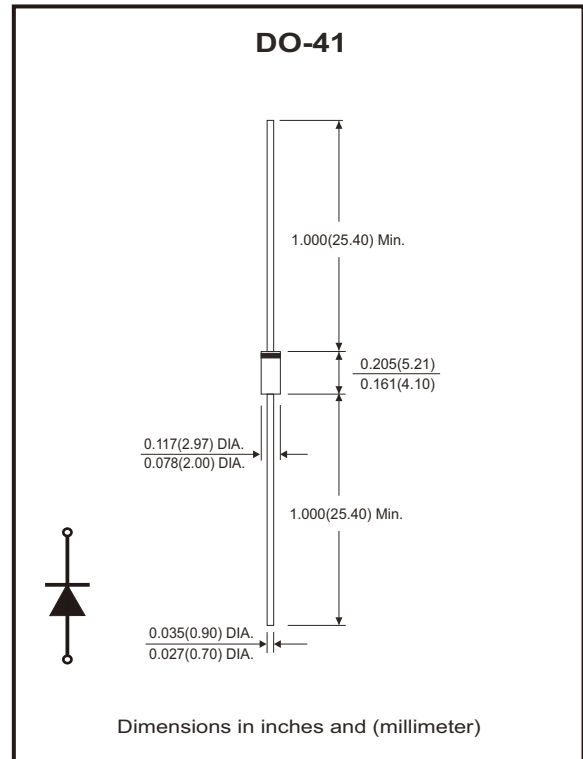


### Features

- 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-750, method 2026
- Mounting position: Any
- Weight: 0.012ounce, 0.34 grams(approx.).



### 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 @TA=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	TA=25°C	5.0							µA
	TA=100°C	50							
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 Temperature 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 ambient and junction to lead at 0.375"(9.5mm) lead length P.C.B mounted.

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

Fig.1 - Typical Forward Current Derating Curve

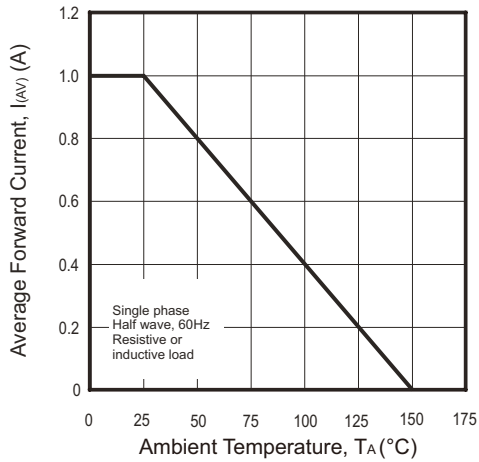


Fig.2 - Maximum. Non-Repetitive Peak Forward Surge Current

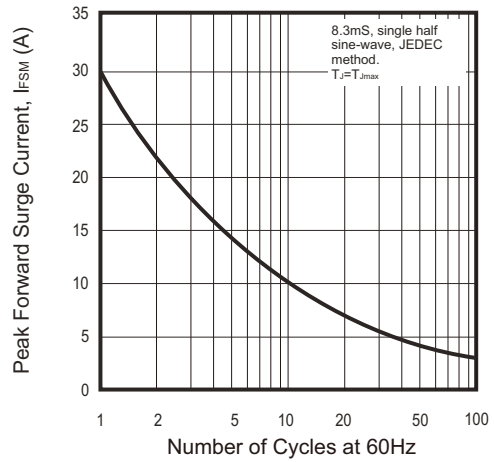


Fig.3 - Typical Instantaneous Forward Characteristics

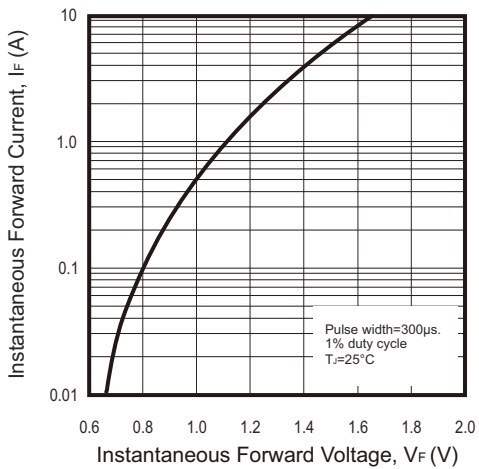


Fig.4 - Typical Reverse Characteristics

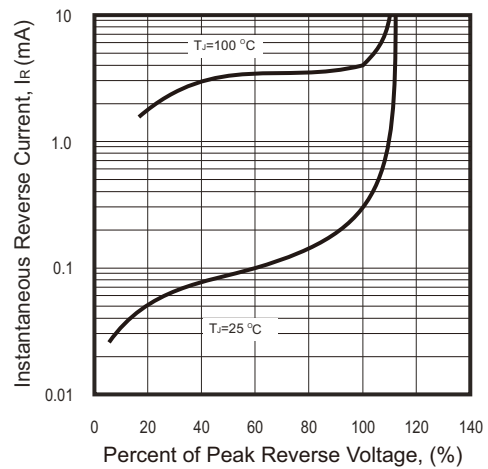
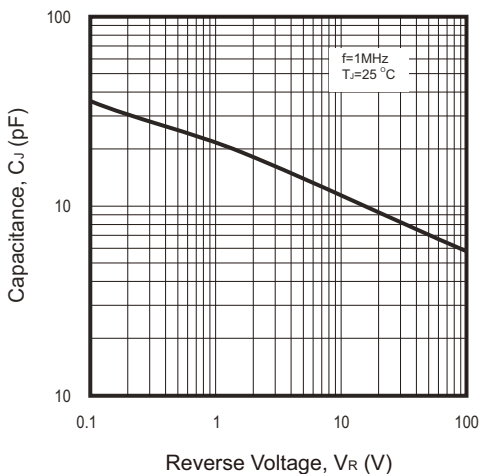


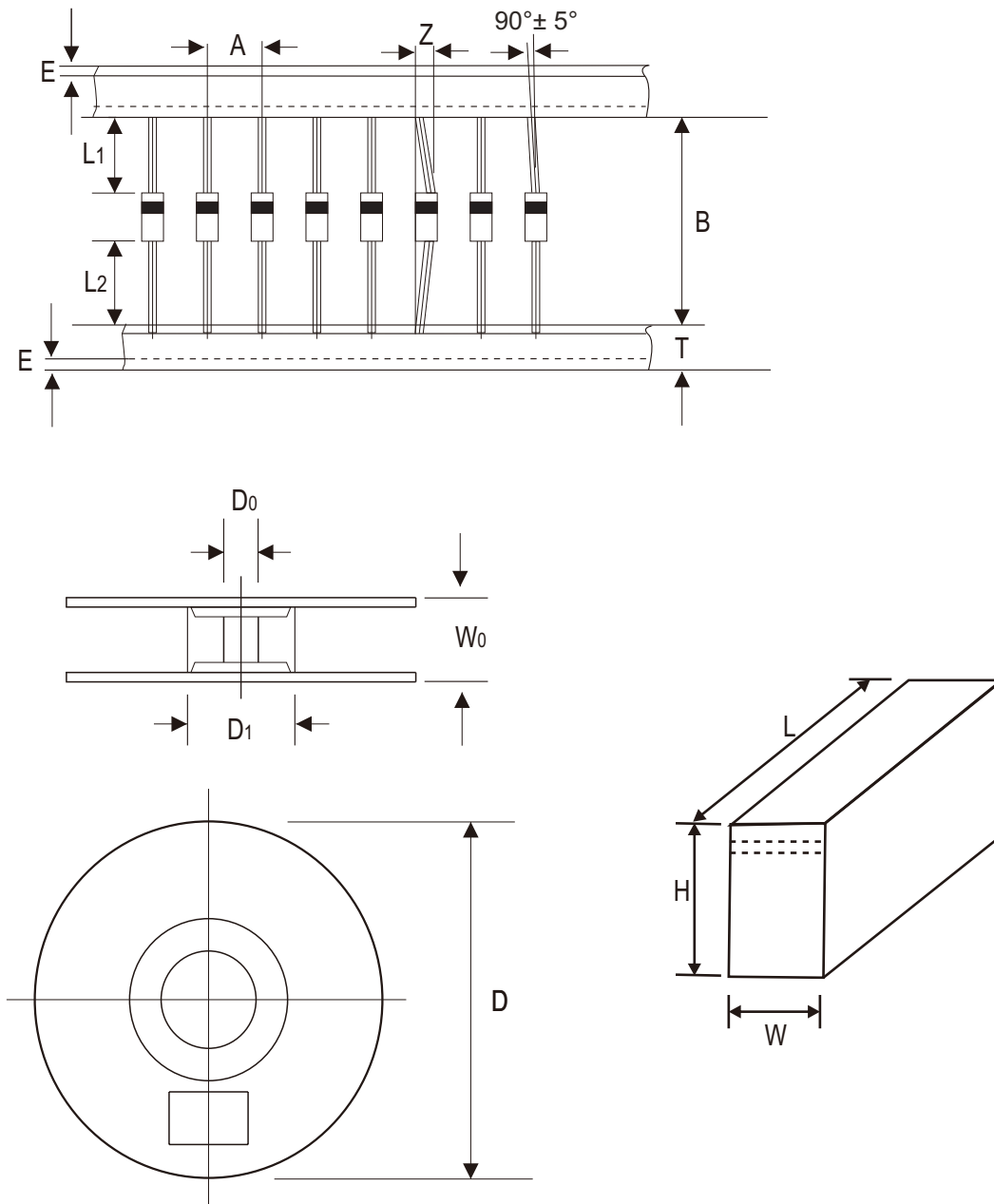
Fig.5 - Typical Junction Capacitance



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## Taping Specification For Axial Lead Diodes



DO-41	SYMBOL	A	B	Z	T	E	L1-L2
	(mm)	$5.00 \pm 0.50$	$52.40 \pm 1.50$	1.60 (max)	$6.00 \pm 0.40$	3.00 (max)	1.00 (max)
	(inch)	$0.197 \pm 0.020$	$2.063 \pm 0.059$	0.063 (max)	$0.236 \pm 0.016$	0.118 (max)	0.039 (max)

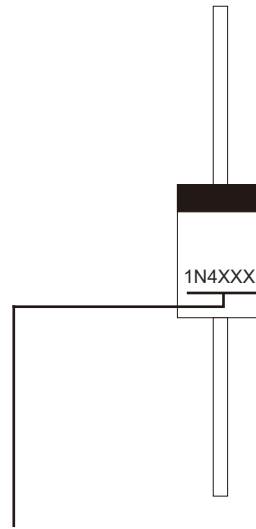
DO-41	SYMBOL	D1	D0	D	W0	L	W	H
	(mm)	$85.70 \pm 0.30$	$16.60 \pm 0.40$	330.00	$72.00 \pm 3.00$	$260.00 \pm 5.00$	$75.00 \pm 5.00$	$150.00 \pm 5.00$
	(inch)	$3.374 \pm 0.012$	$0.654 \pm 0.016$	12.992	$2.835 \pm 0.118$	$10.236 \pm 0.197$	$2.953 \pm 0.197$	$5.906 \pm 0.197$

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## Marking Code

Part Number	Marking Code	Packaging
1N4001T-G	1N4001	REEL
1N4002T-G	1N4002	REEL
1N4003T-G	1N4003	REEL
1N4004T-G	1N4004	REEL
1N4005T-G	1N4005	REEL
1N4006T-G	1N4006	REEL
1N4007T-G	1N4007	REEL
1N4001A-G	1N4001	AMMO
1N4002A-G	1N4002	AMMO
1N4003A-G	1N4003	AMMO
1N4004A-G	1N4004	AMMO
1N4005A-G	1N4005	AMMO
1N4006A-G	1N4006	AMMO
1N4007A-G	1N4007	AMMO
1N4001B-G	1N4001	BULK
1N4002B-G	1N4002	BULK
1N4003B-G	1N4003	BULK
1N4004B-G	1N4004	BULK
1N4005B-G	1N4005	BULK
1N4006B-G	1N4006	BULK
1N4007B-G	1N4007	BULK



**1N4XXX = Product type marking code**

Note:

1) Suffix code after part number to specify packaging item .

Packaging	Code
REEL PACK	T
AMMO PACK	A
BULK PACK	B

## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DO-41	5,000	13

Case Type	BULK PACK
	BOX ( pcs )
DO-41	1,000

Case Type	AMMO PACK
	BOX ( pcs )
DO-41	5,000

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