

## STANDARD RECOVERY RECTIFIERS

1N4001 - 1N4007

DO-41 (Plastic)  
Axial Lead Plastic  
Package



These Axial Lead Mounted Rectifiers are used for General-Purpose Low-Power Applications

### ABSOLUTE MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

DESCRIPTION	SYMBOL	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	UNIT
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_R$								
Non-Repetitive Peak Reverse Voltage (halfwave, single phase, 60Hz)	$V_{RSM}$	60	120	240	480	720	1000	1200	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Current 0.375 " lead length @ $T_a=75^\circ\text{C}$	$I_O$	1.0							A
Non-Repetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30							A
Thermal Resistance from Junction to Ambient in free air	$R_{th(j-a)}$	50							$^\circ\text{C/W}$
Storage Temperature Range	$T_{stg}$	- 55 to +150							$^\circ\text{C}$
Operating Junction Temperature	$T_j$	-55 to +125							$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless specified otherwise )

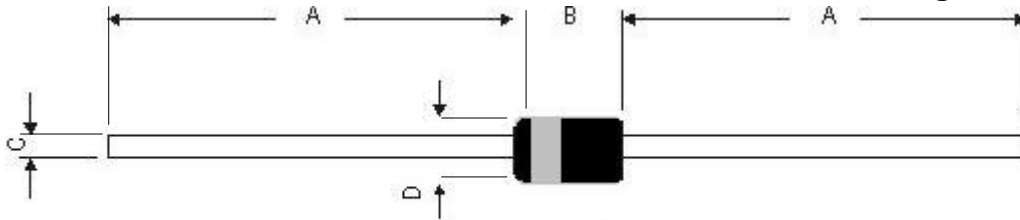
DESCRIPTION	SYMBOL	TEST CONDITION	MAX	UNIT
Maximum Instantaneous Forward Voltage Drop	$V_F$	$I_F = 1.0\text{A}$	1.1	V
Maximum Full-Cycle Average Forward Voltage Drop	$V_{F(AV)}$	$I_O=1.0\text{A}, T_a=75^\circ\text{C}$	0.8	V
Maximum Reverse Current	$I_R$	@ rated $V_R$ $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	5 500	$\mu\text{A}$ $\mu\text{A}$
Maximum Full-Cycle Average Reverse Current	$I_{R(AV)}$	$I_O=1.0\text{A}, T_a=75^\circ\text{C}$	30	$\mu\text{A}$
Junction Capacitance	$C_j$	$V_R = 4\text{V}, f = 1\text{MHz}$	typ 15	pF

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## DO-41 (Plastic) Axial Lead Plastic Package

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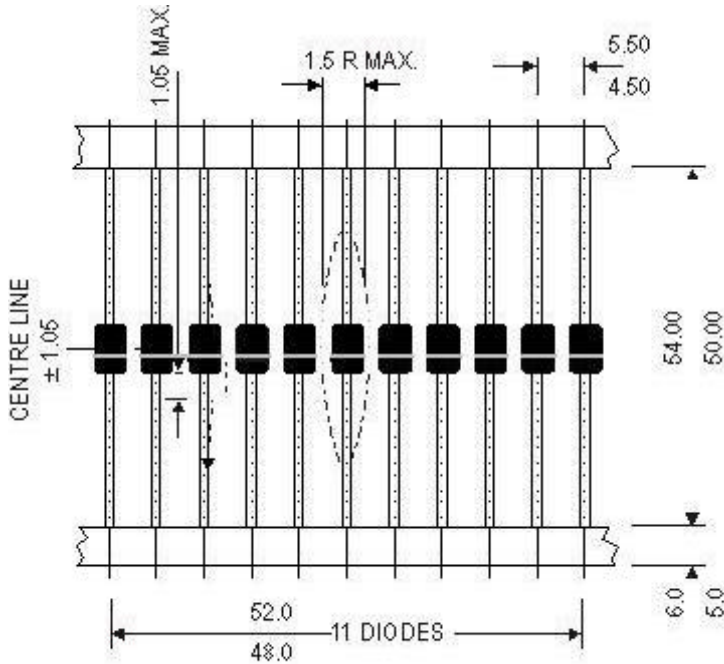


**NOTE:** Cathode is marked by Band.

DIM	MIN	MAX
A	27.90	—
B	4.05	5.20
C	0.75	0.87
D	2.30	2.70

All dimensions are in mm.

### DO-41, 52mm Taping Specification



All dimensions are in mm.

#### 52 mm Taping Specification

1. T & A indicates Axial Tape and Ammo Packing (52 mm Tape Spacing).
2. 300 mm (min) leader tape on every tape.
3. No. of empty places allowed 0.25% without consecutive empty places.
4. Ends of leads shall preferably not protrude beyond the tapes.
5. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

**Packing in Ammo Pack: 5000 pcs./Ammo Pack**

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