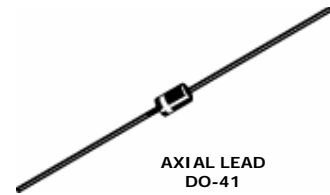


## DO-41 General Purpose Plastic Silicon Rectifier

### Specification Features:

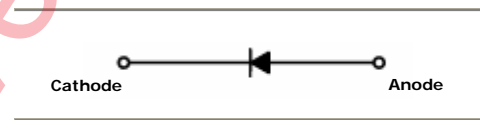
- Case: Epoxy, Molded
- Weight: 0.4 gram (approximately)
- Finish: All external surfaces corrosion resistant and terminal leads are readily solderable
- Lead and mounting surface temperature for soldering purposed: 260°C Max. for 10 seconds 1.16 inch from case
- Low reverse leakage, High forward surge capability
- Cathode indicated by polarity band



DEVICE MARKING DIAGRAM



1N400X : TC1N4001-TC1N4007  
 TC : Tak Cheong Logo  
 Y : Assembly site code (1, 2, 3...)



ELECTRICAL SYMBOL

### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	TC1N4001	TC1N4002	TC1N4003	TC1N4004	TC1N4005	TC1N4006	TC1N4007	Units	
Maximum repetitive peak reverse voltage $V_{RRM}$	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	50	100	200	400	600	800	1000	V	
Maximum average forward rectifier current $I_{F(AV)}$ 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$								1.0	A
Peak forward surge current 8.3mS single half sine-wave superimposed on reted load								30	A
Maximum full load reverse current, $I_{R(AV)}$ full cycle average 0.375" (9.5mm) lead length $T_L=75^\circ\text{C}$								30	$\mu\text{A}$
Operating Junction and storage temperature range								-50 to +150	$^\circ\text{C}$
Typical Thermal Resistance (note1)								60	$^\circ\text{C/W}$

**Note 1:** Thermal resistance from junctiont ambient at 0.375" (9.5mm) lead length, P.C.B. mounted.

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Device Type	$B_V @ I_R$ (Volts) Min	$I_R$ ( $\mu\text{A}$ )	$I_R @ V_R$ ( $\mu\text{A}$ ) Max	$V_R$ (Volts)
TC1N4001	50	5	5	50
TC1N4002	100	5	5	100
TC1N4003	200	5	5	200
TC1N4004	400	5	5	400
TC1N4005	600	5	5	600
TC1N4006	800	5	5	800
TC1N4007	1000	5	5	1000

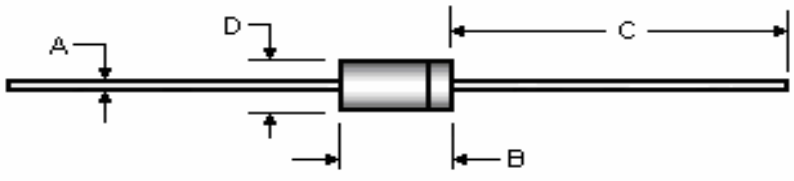
$V_F$  Forward Voltage = 1.1 V Maximum @  $I_F = 1.0$  A for all types

$C_J$  Typical Junction Capacitance = 15 pF at 4.0V, 1MHz

**Ordering Information**

Device	Package	Quantity
TC1N4001~TC1N4007	Bulk	1,000
TC1N4001~TC1N4007TB	Tape and Ammo	5,000
TC1N4001~TC1N4007TR	Tape and Reel	5,000
Others (...contact Tak Cheong sales representatives)		

**Package Outline**

Package	Case Outline				
DO-41					
	DIM	<b>D0-41</b>			
		Millimeters		Inches	
		Min	Max	Min	Max
	<b>A</b>	0.72	0.86	0.028	0.034
	<b>B</b>	4.10	5.20	0.161	0.205
<b>C</b>	25.40	---	1.000	---	
<b>D</b>	2.04	2.71	0.080	0.107	

**Notes:**

1. All dimensions are within JEDEC standard DO-204AL.
2. DO-41 polarity denoted by cathode band.