

**Micro Commercial Components** 



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## Features

- Halogen free available upon request by adding suffix "-HF"
- Low Current Leakage and Low Cost
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## **Maximum Ratings**

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 35 °C/W Junction to Case

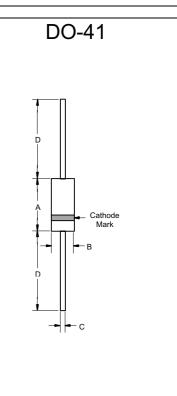
25°C/W Junction to Lead at 0.375"

#### Lead Length P.C.B. Mounted

	Edda Edilgii T.O.D. Modiliod				
MCC	Device	Maximum	Maximum	Maximum	
Catalog	Marking	Recurrent	RMS	DC	
Number		Peak	Voltage	Blocking	
		Reverse		Voltage	
		Voltage			
1N4001	1N4001	50V	35V	50V	
1N4002	1N4002	100V	70V	100V	
1N4003	1N4003	200V	140V	200V	
1N4004	1N4004	400V	280V	400V	
1N4005	1N4005	600V	420V	600V	
1N4006	1N4006	800V	560V	800V	
1N4007	1N4007	1000V	700V	1000V	

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>A</sub> = 75°C			
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms, half sine			
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*			
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μΑ 50μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C			
Typical Junction Capacitance	CJ	15pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V			
Maximum Reverse Recovery Time	T <sub>rr</sub>	2.0us	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A			
Rating for fusing	l <sup>2</sup> t	3.7A <sup>2</sup> s	t<8.3ms			



1N4001

THRU

1N4007

**1** Amp Rectifier

50 - 1000 Volts

DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
А	.166	.205	4.10	5.20			
В	.080	.107	2.00	2.70			
С	.028	.034	.70	.90			
D	1.000	1	25.40				

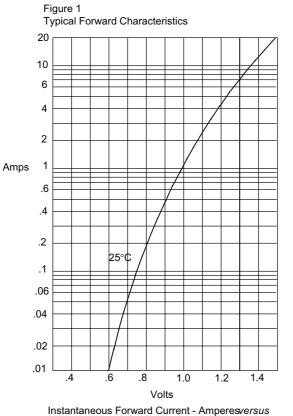
\*Pulse test: Pulse width 300 µsec, Duty cycle 2%

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

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### **Revision:** E

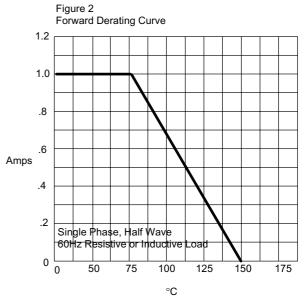
### 1N4001 thru 1N4007



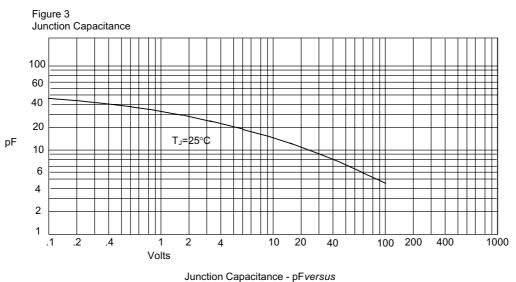
Instantaneous Forward Voltage - Volts



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Average Forward Rectified Current - Amperes/ersus Ambient Temperature  $-^{\circ}C$ 

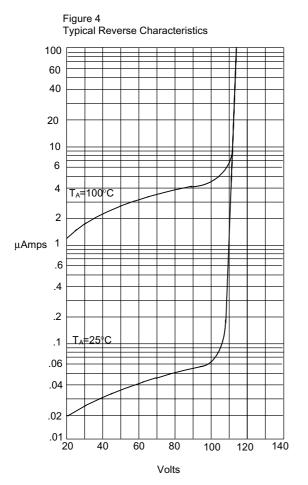


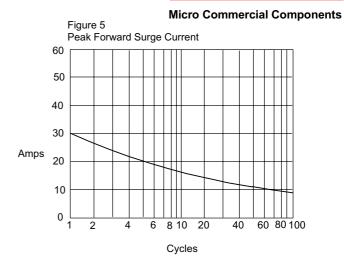


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## 1N4001 thru 1N4007







Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - MicroAmperesersus Percent Of Rated Peak Reverse Voltage - Volts

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## **Ordering Information :**

Device	Packing	
Part Number-TP	Tape&Reel: 5Kpcs/Reel	
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box	
Part Number-BP	Bulk: 50Kpcs/Carton	

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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## **Mouser Electronics**

Authorized Distributor

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Micro Commercial Components (MCC):

<u>1N4001-T</u> <u>1N4002-T</u> <u>1N4003-T</u> <u>1N4004-T</u> <u>1N4005-T</u> <u>1N4006-T</u> <u>1N4007-T</u>