



Micro Commercial Components 21201 Itasca Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

## 1N4016

## **Features**

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- High Current Capability
- Low Forward Voltage Drop.
- High Reliability and High Surge Current Capability
- Exceeds Environmental Standards of MIL-S-19500/228
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## **Maximum Ratings**

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 50°C/W junction to Ambient
- Typical Thermal Resistance: 25°C/W junction to Lead
- For capacitive load. Derate current by 20%

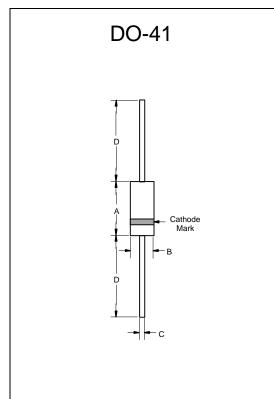
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N4016	1600V	1120V	1600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Rectified Current	I <sub>(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>	1.1V	I <sub>FM</sub> = 1.0A; T <sub>C</sub> = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 500μA	T <sub>C</sub> = 25°C T <sub>C</sub> = 100°C
Typical Junction Capacitance	CJ	15pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

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

# 1.0 Amp Plastic Silicon Rectifier 1600 Volts



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

Revision: A 2011/01/01

# 1N4016



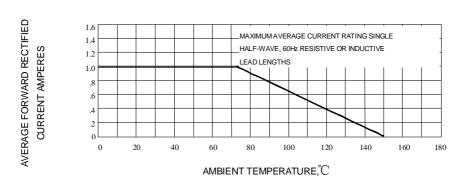


Fig. 1-TYPICAL FORWARD CURRENT DERATING CURVE

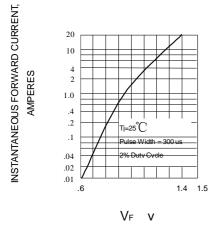


Fig. 2-TYPICAL FORWARD CHARACTERISTICS

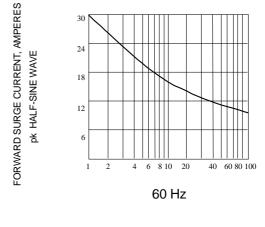


Fig. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

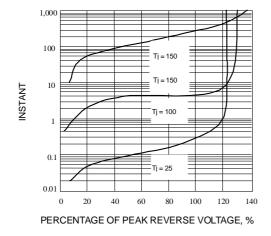


Fig. 4-TYPICAL REVERSE CHARACTERISTICS

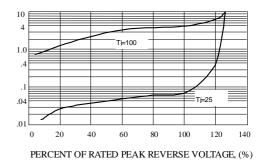


Fig. 5-TYPICAL REVERSE CHARACTERISTICS



## **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	

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