

#### **Features**

- Low Current Leakage And Low Forward Voltage
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)

## **Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical Thermal Resistance: 15°C/W Junction to Ambient(Note2)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N5400	1N5400	50V	35V	50V
1N5401	1N5401	100V	70V	100V
1N5402	1N5402	200V	140V	200V
1N5404	1N5404	400V	280V	400V
1N5405	1N5405	500V	350V	500V
1N5406	1N5406	600V	420V	600V
1N5407	1N5407	800V	560V	800V
1N5408	1N5408	1000V	700V	1000V

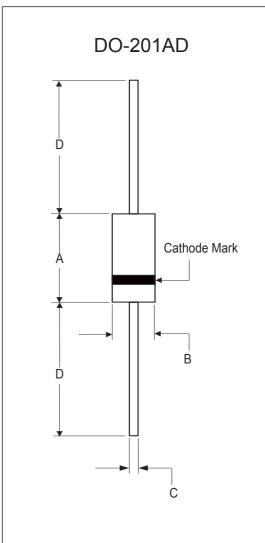
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	3.0A	T <sub>A</sub> =105°C
Peak Forward Surge Current	I <sub>FSM</sub>	200A	8.3ms,Half Sine
Forward Voltage	V <sub>F</sub>	1.0V	I <sub>F</sub> =3.0A; T <sub>J</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 100μA	T <sub>J</sub> =25°C; T <sub>J</sub> =150°C
Typical Junction Capacitance	CJ	40pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

#### Note:

- 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.
- 2. Valid Provided That Leads are Kept at Ambient Temperature at a Distance of 9.5mm From The Case.

# 3 Amp Rectifier 50 to 1000 Volts



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.287	0.374	7.30	9.50		
В	0.189	0.208	4.80	5.30		
С	0.048	0.052	1.20	1.30		
D	1.000		25.40			



### **Curve Characteristics**

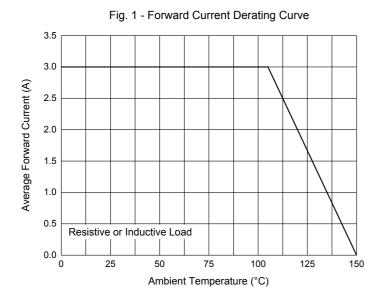


Fig. 3 - Typical Instantaneous Forward Characteristics

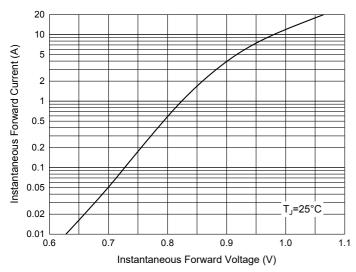


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

250

150

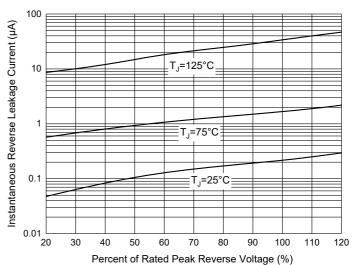
150

8.3 ms Single Half Sine-Wave

0

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





#### **Ordering Information**

Device	Packing	
Part Number-TP	Tape&Reel: 1.2Kpcs/Reel	
Part Number-AP	Ammo Packing: 1.2Kpcs/Ammo Box	
Part Number-BP	Bulk:500pcs/Box,12Kpcs/Carton	

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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