

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Low Forward Voltage Drop And High Current Capability
- High Surge Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +125°C
- Maximum Thermal Resistance: 28°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N5820	1N5820	20V	14V	20V
1N5821	1N5821	30V	21V	30V
1N5822	1N5822	40V	28V	40V

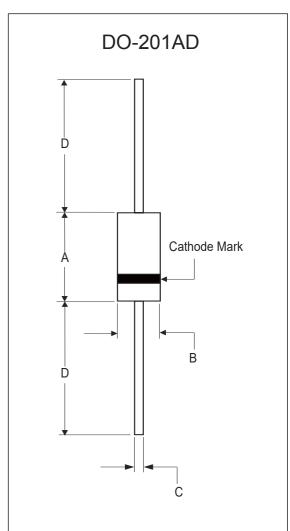
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	3.0A	T _A =85°C		
Peak Forward Surge Current	I _{FSM}	80A	8.3ms,Half Sine		
Maximum Instantaneous Forward Voltage 1N5820 1N5821 1N5822	V _F	0.475V 0.500V 0.525V	I _{FM} =3.0A; T _J =25°C (Note 2)		
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.1mA 20mA	T _J =25°C; T _J =100°C		
Typical Junction Capacitance	CJ	200pF	Measured at 1.0MHz, V _R =4.0V		

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

2. Pulse test: Pulse width 300 µsec, Duty cycle 1%

3 Amp Schottky Barrier Rectifier 20 to 40 Volts



DIMENSIONS							
DIM	INCHES		MM		NOTE		
Dilvi	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

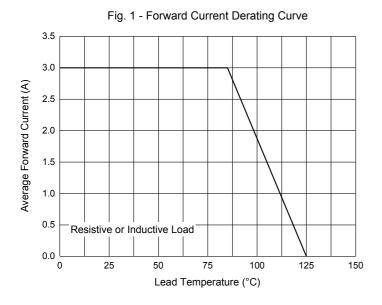


Fig. 3 - Typical Instantaneous Forward Characteristics

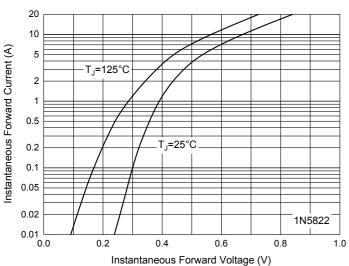


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

100

(V) 100

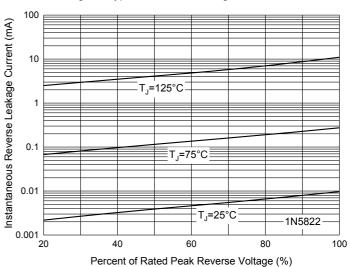
80

40

20

8.3 ms Single Half Sine-Wave
0
1
10
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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