

### 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

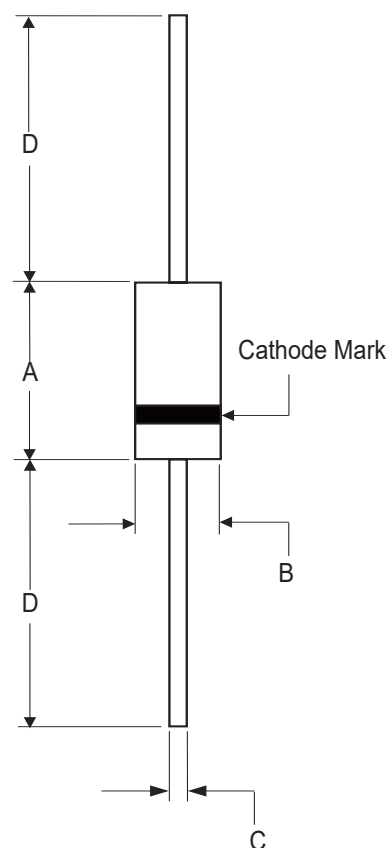
Average Forward Current	$I_{F(AV)}$	3.0A	$T_A=85^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	80A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	0.475V 0.500V 0.525V	$I_{FM}=3.0A$ ; $T_J=25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.1mA 20mA	$T_J=25^\circ\text{C}$ ; $T_J=100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	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  $\mu\text{sec}$ , Duty cycle 1%

## 3 Amp Schottky Barrier Rectifier 20 to 40 Volts

DO-201AD



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.287	0.374	7.30	9.50	
B	0.189	0.208	4.80	5.30	
C	0.048	0.052	1.20	1.30	
D	1.000	-----	25.40	-----	

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

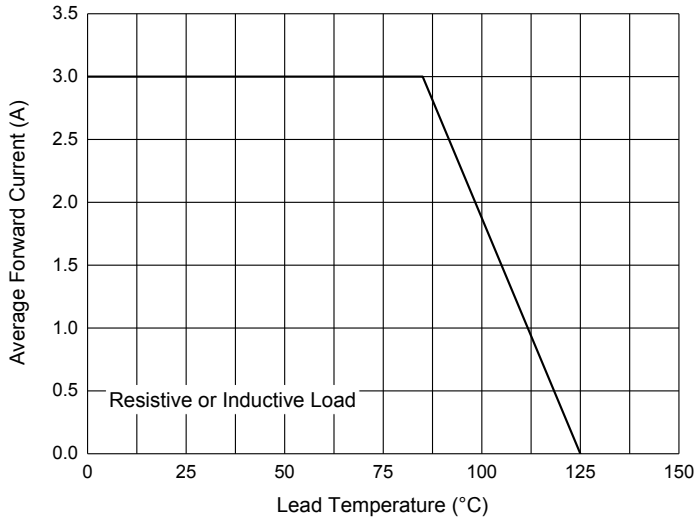


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

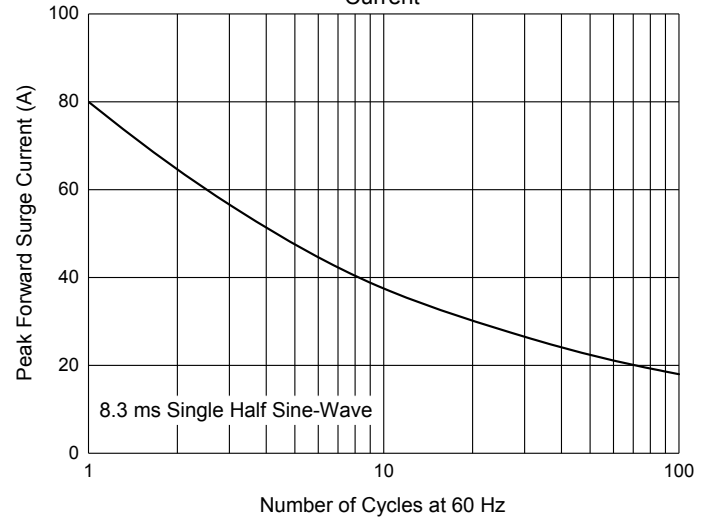


Fig. 3 - Typical Instantaneous Forward Characteristics

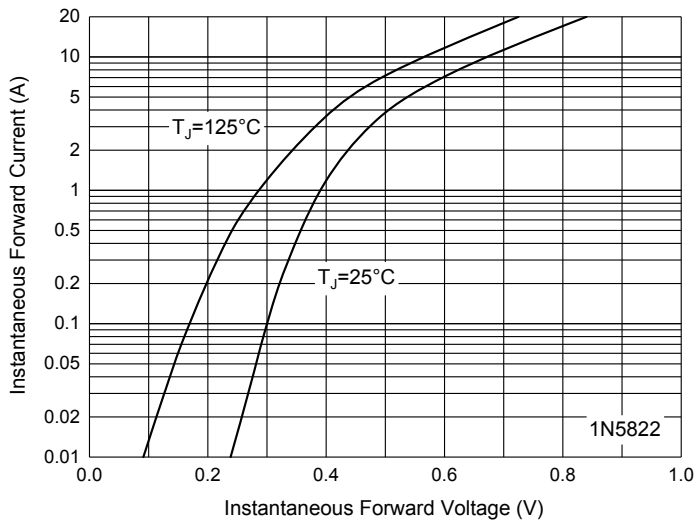
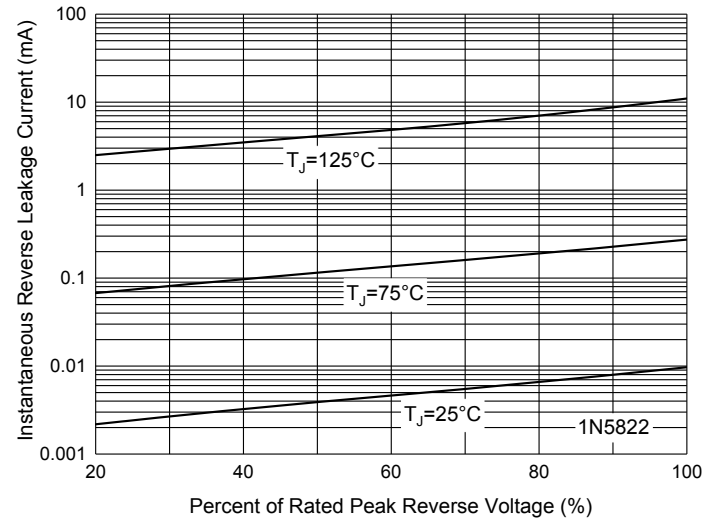


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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