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**1N5820
THRU
1N5822**

Features

- Lead Free Finish/RoHS Compliant(Note 1)
- Low Forward Voltage Drop and High Current Capability
- High Surge Current Capability
- 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 +125°C
- Maximum Thermal Resistance; 28°C/W Junction To Ambient

Catalog 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

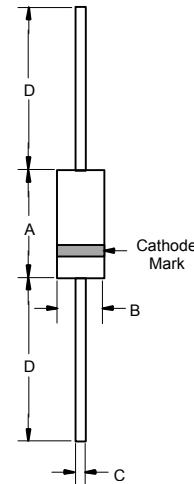
Average Forward Current	$I_{F(AV)}$	3.0A	$T_A = 85^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	80A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1N5820 1N5821 1N5822	V_F	.475V .500V .525V	$I_{FM} = 3.0\text{A};$ $T_J = 25^\circ\text{C}(\text{Note } 2)$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 20mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance	C_J	200pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

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

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

**3 Amp Schottky
Barrier Rectifier
20 - 40 Volts**

DO-201AD

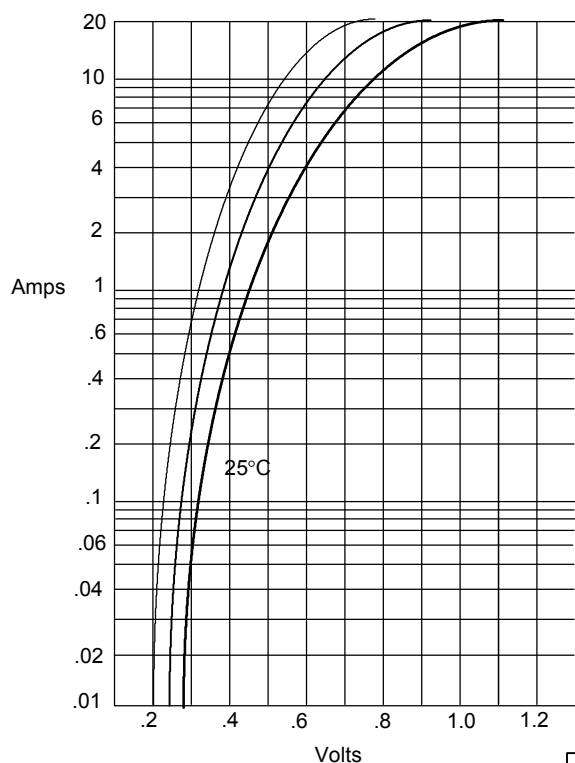


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.287	.374	7.30	9.50	
B	.189	.208	4.80	5.30	
C	.048	.052	1.20	1.30	
D	1.000	---	25.40	---	

1N5820 thru 1N5822



Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

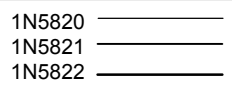
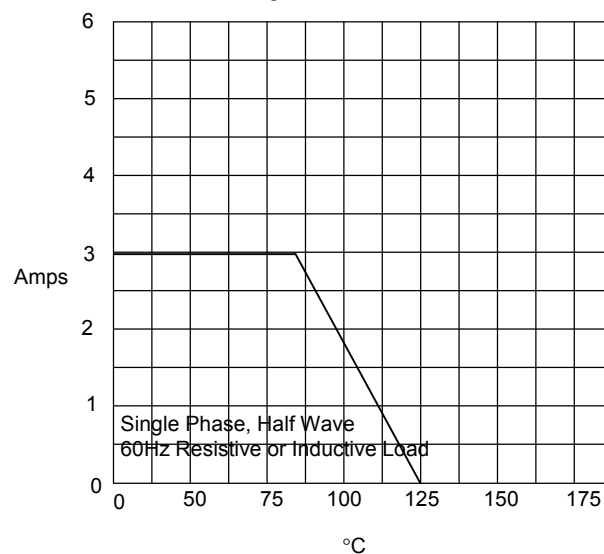
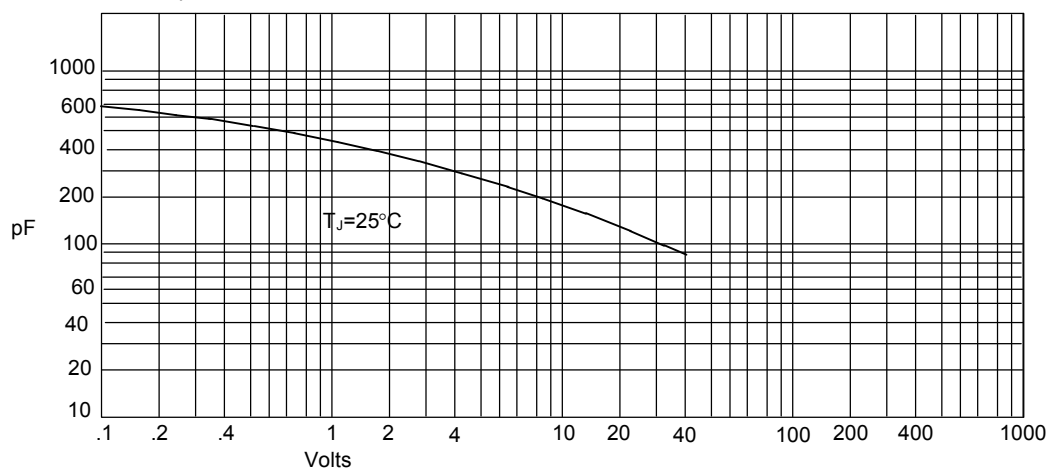


Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 3
Junction Capacitance



Junction Capacitance - pF versus
Reverse Voltage - Volts

