



Micro Commercial Components

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

**1N5820
THRU
1N5822**

Features

- 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
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 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

MCC 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

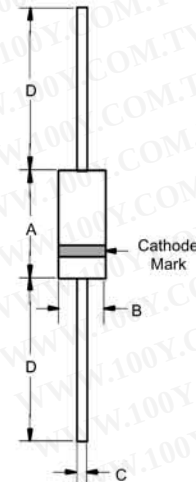
Average Forward Current	$I_{F(AV)}$	3.0A	$T_A = 85^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	80A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	.475V .500V .525V	$I_{FM} = 3.0\text{A};$ $T_J = 25^\circ\text{C}(\text{Note } 2)$
Maximum DC Reverse Current At Rated DC Blocking Voltage	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



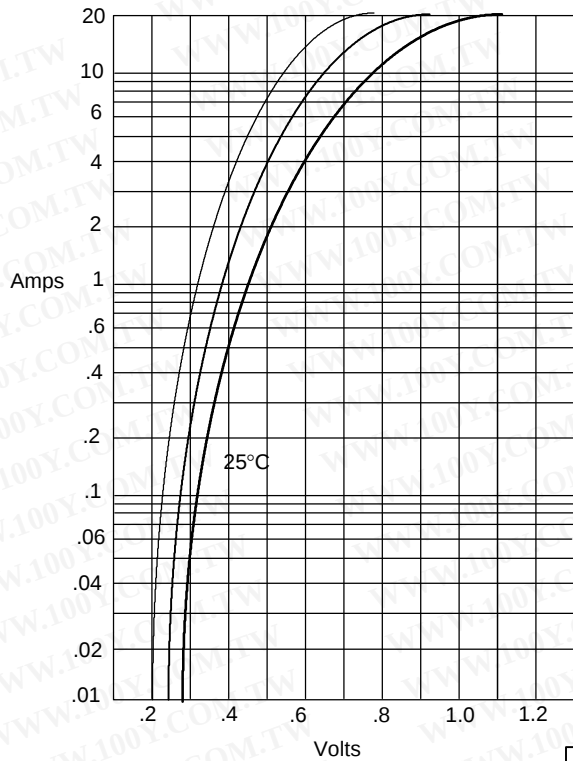
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.287	.374	7.30	9.50	
B	.189	.208	4.80	5.30	
C	.048	.052	1.20	1.30	
D	1.000	—	25.40	—	

1N5820 thru 1N5822

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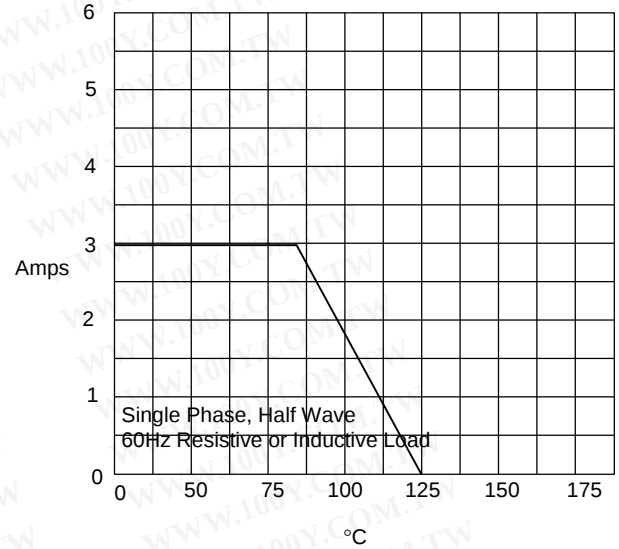
Figure 1
 Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus
 Instantaneous Forward Voltage - Volts

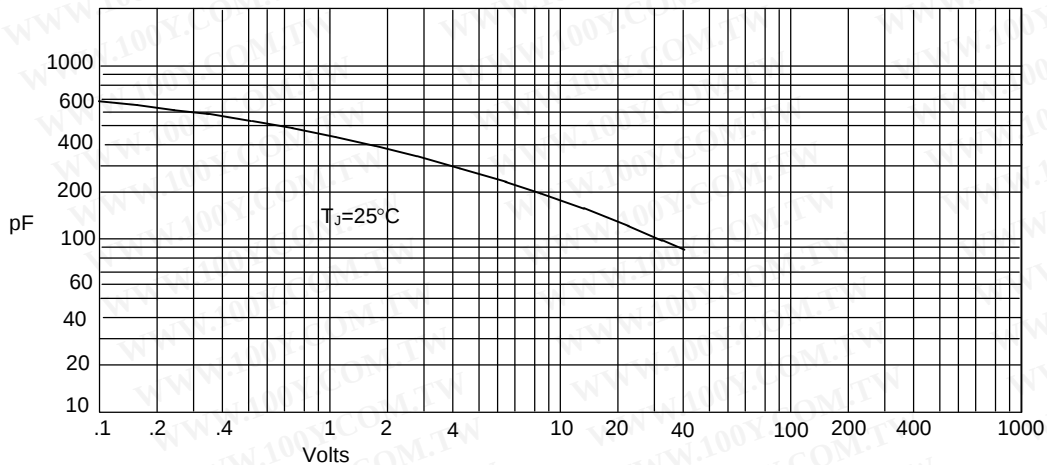
1N5820
 1N5821
 1N5822

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

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Figure 4
TYPICAL REVERSE CHARACTERISTICS

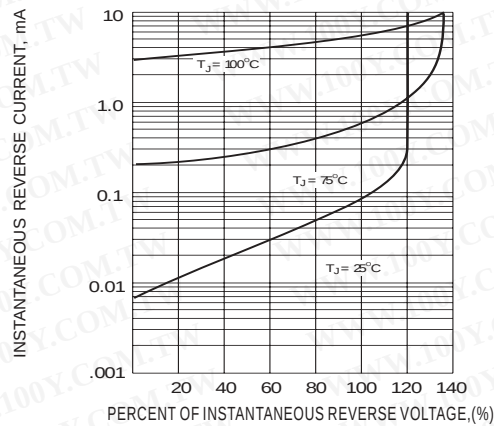
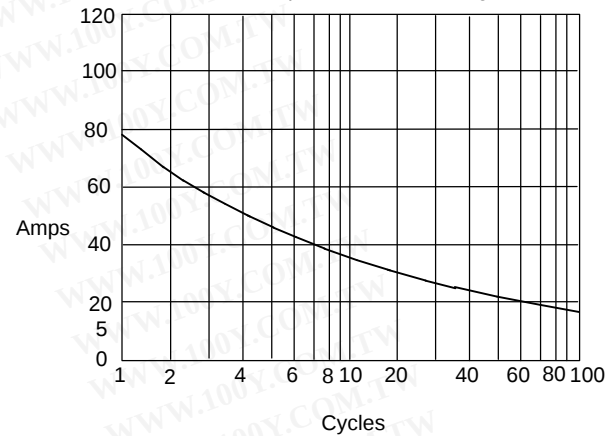


Figure 5
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles



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Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel; 1.2Kpcs/Reel
(Part Number)-AP	Ammo Packing;1.2Kpcs/AmmoBox
(Part Number)-BP	Bulk;500pcs/Box

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