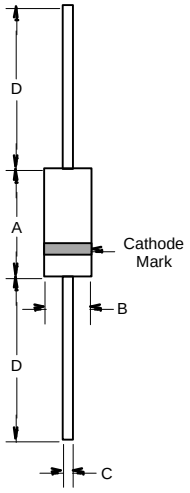
1N5820 THRU 1N5822

3 Amp Schottky Barrier Diode 20 - 40 Volts

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
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

DO-201AD



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.287	.374	7.30	9.50	
B	.189	.208	4.80	5.30	
C	.043	.052	1.10	1.30	
D	1.000	---	25.40	---	

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

RJW 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°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} = 3.0A; T_J = 25°C(Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5mA 20mA	T_J = 25°C T_J = 100°C
Typical Junction Capacitance	C_J	200pF	Measured at 1.0MHz, V_R=4.0V

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

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

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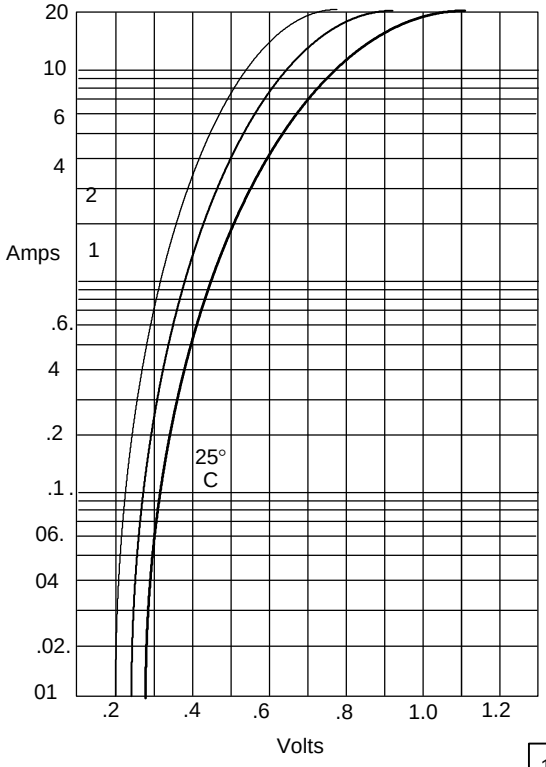
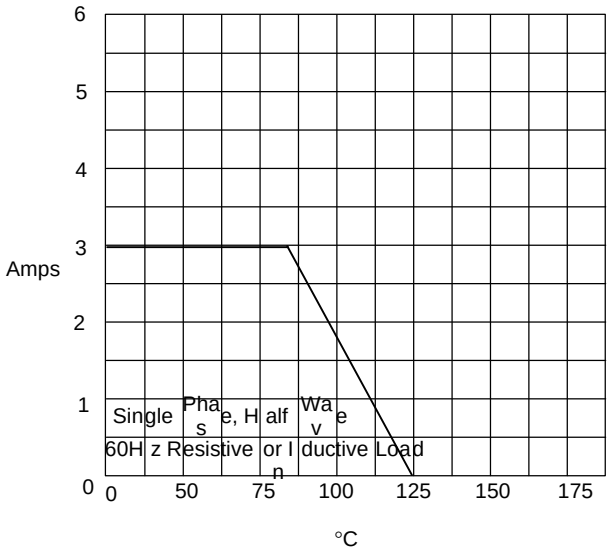
Figure 1
Typical Forward Characteristics



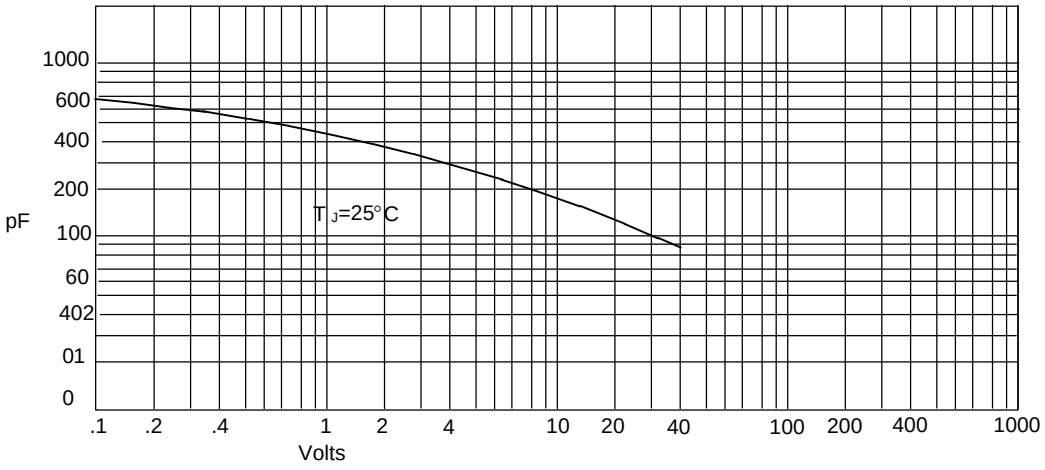
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

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

Figure 4
TYPICAL REVERSE CHARACTERISTICS

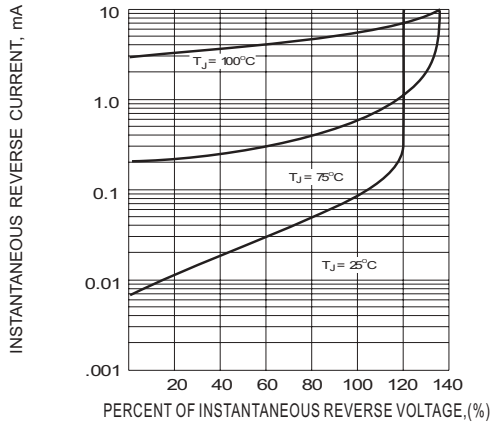
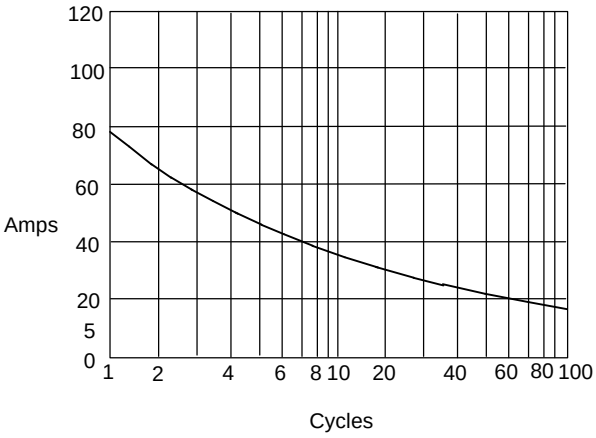


Figure 5
Maximum Non-Repetitive Forward Surge Current



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