

1N5820 THRU 1N5822

AXIAL SCHOTTKY BARRIER RECTIFIER

DO-201AD Axial Schottky Barrier Rectifier

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Applications

These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping.

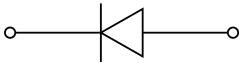
Mechanical Data

- Case: DO-201AD
Molding compound meets UL 94V-0 flammability rating
- Terminals: Solder plated, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Cathode line denotes the cathode end

Function Diagram

Reverse Voltage
20-40 V
Forward Current
3 Ampere

DO-201AD



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	1N5820	1N5821	1N5822
Device marking code			1N5820	1N5821	1N5822
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	20	30	40
Maximum RMS Voltage	V_{RMS}	V	14	21	28
Maximum DC blocking Voltage	V_{DC}	V	20	30	40
Maximum Average Forward Rectified Current @60Hz sine wave, Resistance load, TL (Fig.1)	$I_{F(AV)}$	A	3.0		
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	80		
Storage temperature	T_{stg}	°C	-55 ~ +150		
Junction temperature	T_j	°C	-55 ~ +150		
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	20		
	$R_{\theta J-L}$	°C /W	10		

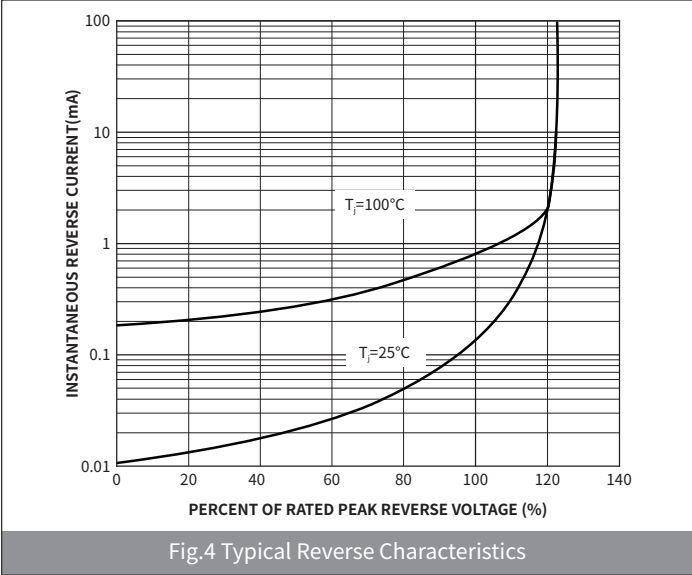
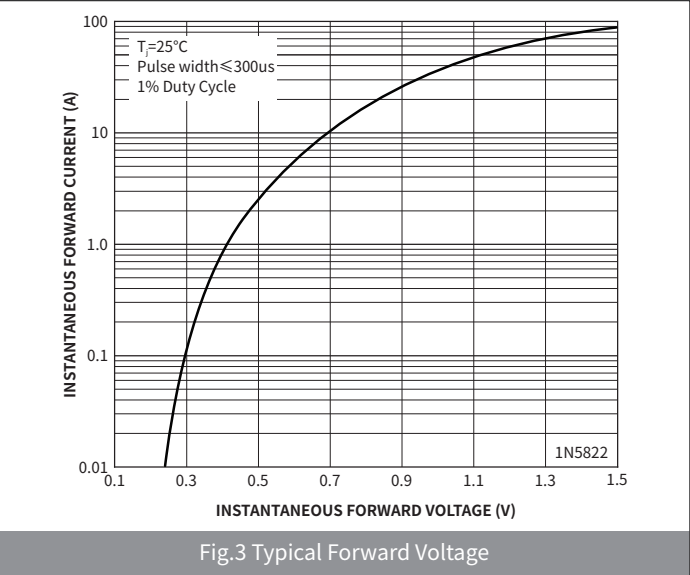
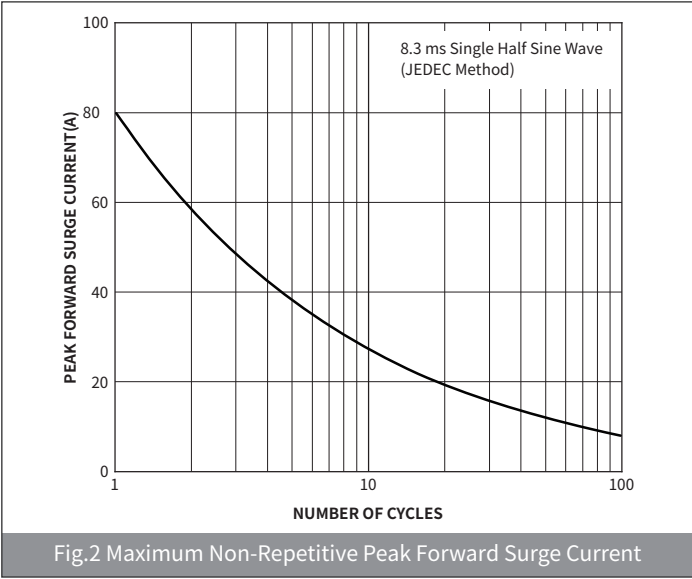
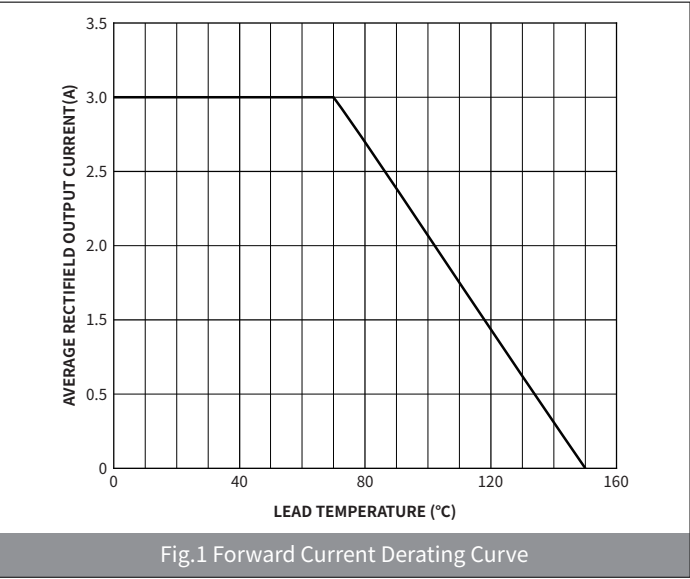
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Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	1N5820	1N5821	1N5822
Maximum instantaneous forward voltage	$I_F=3.0A$	V_F	V	0.475	0.500	0.525
Maximum DC reverse currentat rated DC blocking voltage	$V_R=V_{DC}, T_A=25^{\circ}C$	I_{R1}	mA	0.1		
	$V_R=V_{DC}, T_A=100^{\circ}C$	I_{R2}		5		
Typical junction capacitance	4.0V DC,1MHz	C_J	pF	250		

Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



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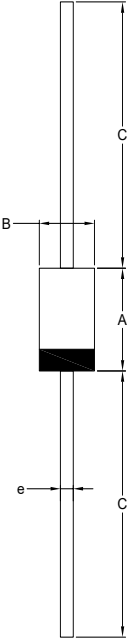
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● Ordering Information

PACKAGE	UNIT WEIGHT(g)	BOX(pcs)	CARTON(pcs)
DO-201AD	0.954	1200	12000

● Package Outline Dimensions (DO-201AD)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	7.200	9.500	0.285	0.375
B	5.000	5.600	0.197	0.220
C	25.400	-	1.000	-
e	1.150	1.250	0.046	0.050



The diagram illustrates the physical dimensions of the DO-201AD axial Schottky barrier rectifier package. It shows a side view of the component with four dimension lines labeled A, B, C, and e. Dimension A is the height of the main body, B is the width of the main body, C is the total length including the leads, and e is the width of the leads. The package has a central rectangular body with a black band near the bottom, and two long, thin leads extending from the top and bottom.