

3.0 AMP. Schottky Barrier Rectifier

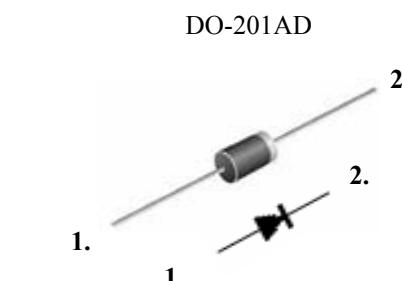
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed:
 250°C/10 seconds 0.375" (9.5mm) lead length,
 5lbs. (2.3kg) tension
 • Polarity: Color band denotes cathode end
 • Mounting Position: Any
 • Weight: 0.04 oz., 1.12 g
 • Packaging codes/options:
 1/Bulk - 1.5K per container, 15K per box
 4/1.4K per 13" reel, 5.6K per box
 23/1K per ammo mag., 9K per box



Pin:
 1.ADODE
 2.CATHODE BAND

ORDERING INFORMATION

Device	Operating Temperature	Package
1N582xCE	-20°C ~ +85°C	DO-201AD

Note: x is the index if Voltage Range

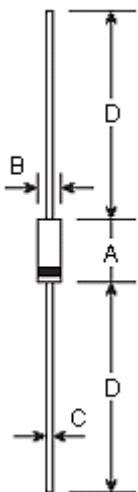
MAXIMUM RATINGS AND THERMAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	1N5820	1N5821	1N5822	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Non-repetitive peak reverse voltage	V_{RSM}	24	36	48	V
Maximum average forward rectified current 0.375"(9.5mm)lead length at $T_L=95^\circ\text{C}$	$I_{F(AV)}$	3.0			A
Peak forward surge current 8.3ms single Half sine-wave superimposed on rated load (Jedec Method)at $T_L=75^\circ\text{C}$	I_{FSM}	80			A
Maximum instantaneous forward voltage at 3.0A ⁽¹⁾	V_F	0.475	0.500	0.525	V
Maximum average reverse current at rated $T_A=25^\circ\text{C}$ DC blocking voltage ⁽¹⁾	I_R	2.0 20			mA
Typical thermal resistance ⁽²⁾	$R_{\theta JA}$ $R_{\theta JL}$	40 10			°C/W
Storage temperature range	T_J, T_{STG}	-65 °C ~ +125 °C			°C

*JEDEC registered values

Notes: 1.Pulse test:300us pulse width, 1% duty cycle

2.Thermal resistance from junction to lead vertical P.C.B. mounted, 0.500"
(12.7mm) lead length with 2.5 x 2.5"(63.5 x 63.5mm) copper pad

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DO-201AD DIMENSION				
DIM	mm		INCHES	
	MIN	MAX	MIN	MAX
A	7.200	9.500	0.285	0.375
B	4.800	5.300	0.188	0.210
C	1.200	1.300	0.048	0.052
D	25.400	-	1.000	-