



1N5820 Thru 1N5822

3 AMP SCHOTTKY BARRIER RECTIFIER

FEATURES

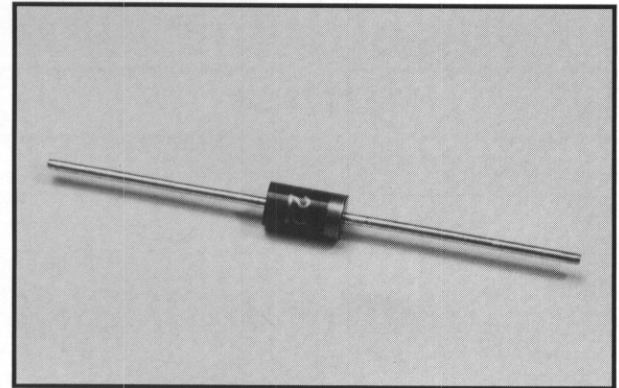
- Metal semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- Plastic material UL recognized 94V-0
- For use in low voltage, high frequency inverters, free wheeling and polarity protection applications

Mechanical Data

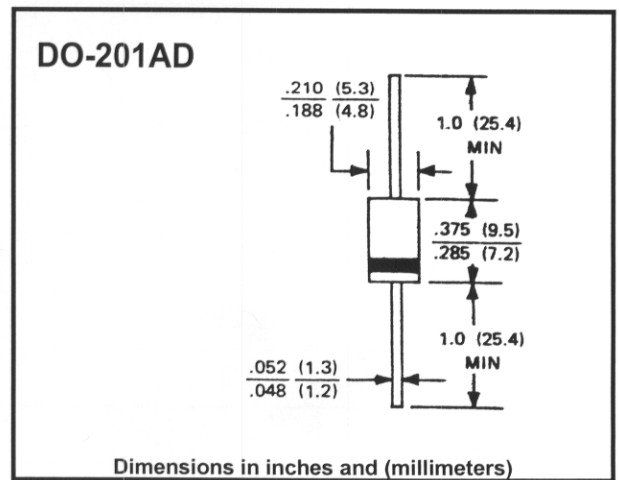
- Case: JEDEC DO-201AD molded plastic
- Leads solderable per MIL-STD-202 method 208
- Polarity: color band denotes cathode
- Weight: 0.04 ounces, 1.12 grams

Maximum Ratings & Characteristics

- Ratings at 25° C ambient temperature unless otherwise specified
- Single phase, half wave, 60 Hz, resistive or inductive load
- For capacitive load, derate current by 20%



Outline Drawing



		1N5820	1N5821	1N5822	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	V
Maximum RMS Input Voltage	V _{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	V
Maximum Average Forward Output Current @ T _L = 95°C	I (AV)	3.0			A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC Method) @ T _L = 75°C	I _{FSM}	80			A
Maximum Forward Voltage Drop At 3.0A DC At 9.4A DC	V _F	0.475 0.850	0.500 0.900	0.525 0.950	V
Maximum Average DC Reverse Current @ T _A = 25°C @ T _A = 100°C	I _R	2 20			mA
Typical Thermal Resistance*(See Note)	R _(THJA)	20			°C/W
Typical Junction Capacitance**(See Note)	C _J	250			pF
Operating Temperature Range	T _J	-65 to +125			°C
Storage Temperature Range	T _{STG}	-65 to +150			°C

Note: * Lead temperature reference is cathode lead .375" (9.5mm) from case

** Measured at 1 MHz and applied reverse voltage of 4.0V DC