

1N5820 THRU 1N5822

SCHOTTKY BARRIER RECTIFIERS

FEATURES:

- Low power loss, high efficiency
- High surge current capability
- Low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling application

MECHANICAL DATA

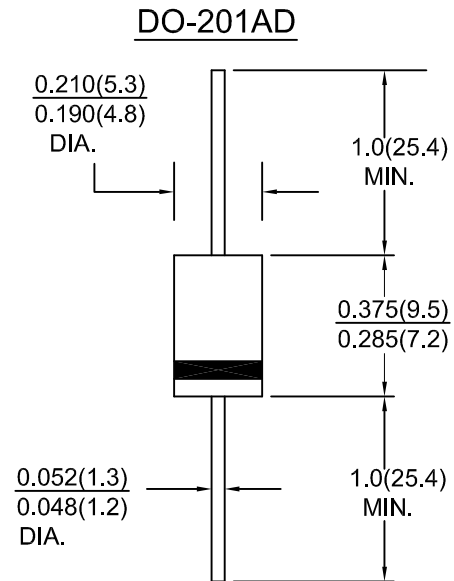
Case : Molded plastic use UL 94V-0 recognized flame retardant epoxy

Terminals : Axial leads, solderable per MIL-STD-202 Method 208

Polarity : Color band on body denotes cathode end

Mounting Position : Any

Weight : 1.12 grams, 0.040 ounce



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20 %.

Characteristic	Symbol	1N5820	1N5821	1N5822	Units
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	Volts
Maximum average forward rectified current at $T_L=95^\circ\text{C}$	$I_{(AV)}$	3.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	80.0			Amps
Maximum instantaneous forward voltage drop at 3.0 A (NOTE 1)	V_F	0.50	0.55	0.55	Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	I_R		2.0 20.0		mA
Typical thermal resistance	R_{th-JA}	40.0			$^\circ\text{C/W}$
	R_{th-JL}	10.0			
Operating junction ,and storage temperature range	T_j, T_{stg}	-65 to +125			$^\circ\text{C}$

NOTE :

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

RATINGS AND CHARACTERISTIC CURVES 1N5820 THRU 1N5822

