

SCHOTTKY BARRIER RECTIFIERS

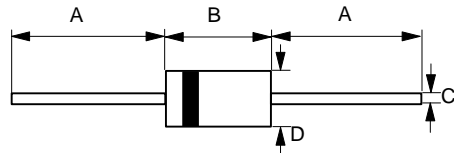
REVERSE VOLTAGE - **20 to 40** Volts
FORWARD CURRENT - **3.0** Amperes

FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.04 ounces, 1.1 grams
- Mounting position : Any

DO-201AD


DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	7.30	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	1N5820	1N5821	1N5822	UNIT
Maximum Recurrent 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
Maximum Average Forward Rectified Current .375", (9.5mm) Lead Lengths @ T _L =95°C	I _(AV)	3.0			A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I _{FSM}	80			A
Maximum forward Voltage at 3.0A DC	V _F	0.475	0.500	0.525	V
Maximum forward Voltage at 9.4A DC	V _F	0.850	0.900	0.950	V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	2 20			mA mA
Typical Thermal Resistance (Note 1)	R _{θJL}	10			°C/W
Typical Junction Capacitance (Note 2)	C _J	250			pF
Operating Temperature Range	T _J	-55 to +125			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

NOTES : 1.Thermal Resistance Junction to Lead.

2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

RATING AND CHARACTERISTIC CURVES
1N5820 thru 1N5822

FIG.1 - FORWARD CURRENT DERATING CURVE

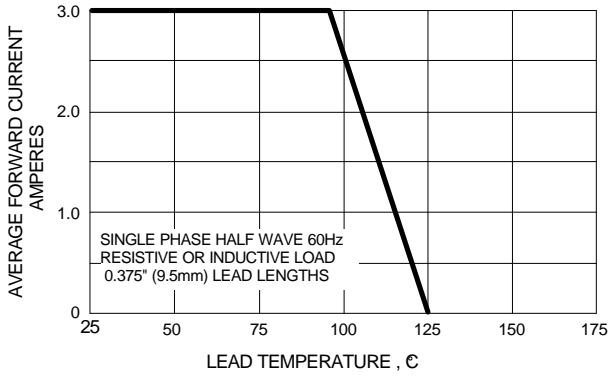


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

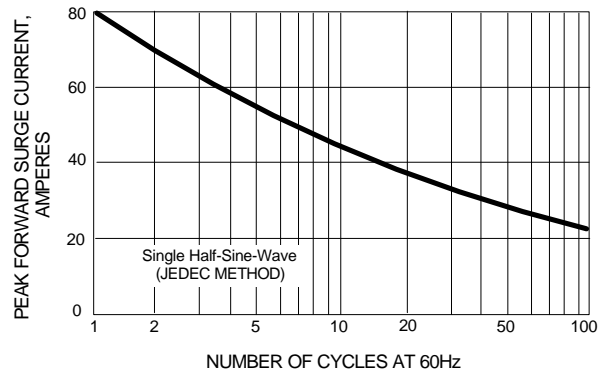


FIG.3 - TYPICAL JUNCTION CAPACITANCE

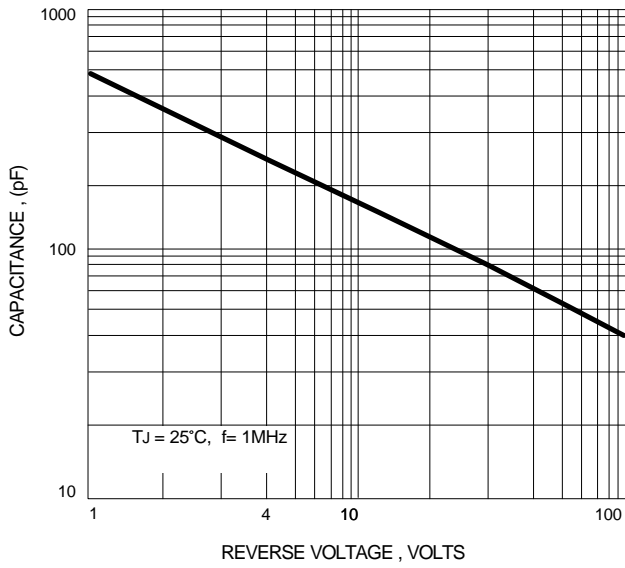


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

