LITE-ON SEMICONDUCTOR

1N5820 thru 1N5822

SCHOTTKY BARRIER RECTIFIERS

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

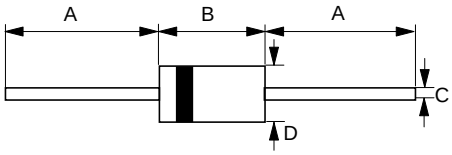
FEATURES

- 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℃ 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)	$R_{\theta JL}$	20			°C/W
Typical Junction Capacitance (Note 2)	C_J	250			pF
Operating Temperature Range	T_J	-55 to +125			℃
Storage Temperature Range	T_{STG}	-55 to +150			℃

NOTES : 1.Thermal Resistance Junction to Lead.
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

REV. 2, 01-Dec-2000, KDHF01

FIG.1 - FORWARD CURRENT DERATING CURVE

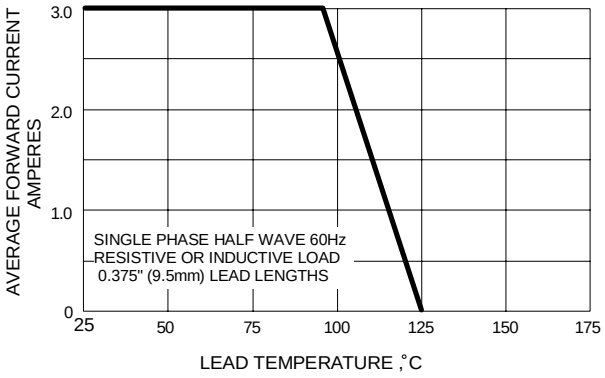


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

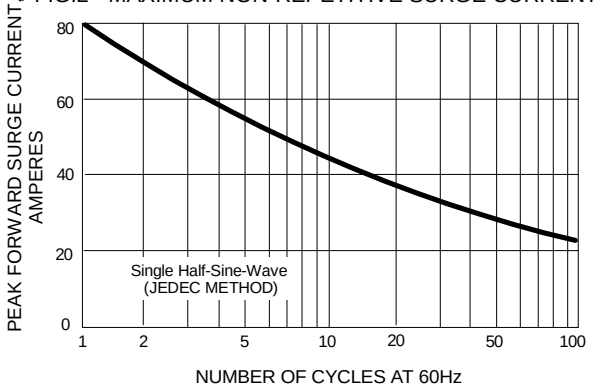


FIG.3 - TYPICAL JUNCTION CAPACITANCE

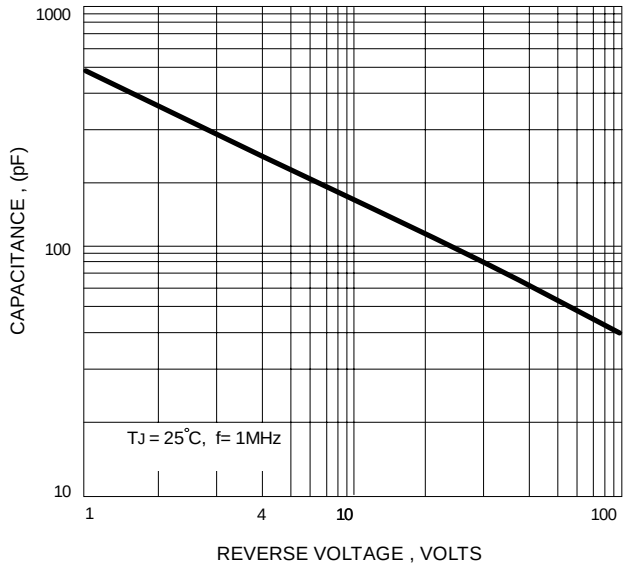


FIG.4 - TYPICAL FORWARD CHARACTERISTICS