

CTC 1N5820-1N5822 RECTIFIER Datasheet

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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

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SCHOTTKY BARRIER RECTIFIERS

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

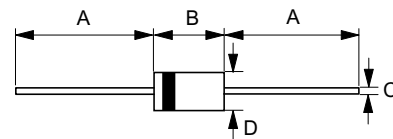
FEATURES

- 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 : 1.071. grams
- Mounting position : Any

DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	8.50	9.50
C	1.20 ϕ	1.30 ϕ
D	5.0 ϕ	5.60 ϕ
Dimensions in millimeters		

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%

PARAMETER	SYMBOL	1N5820	1N5821	1N5822	UNIT
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current	IF	3.0			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	80			A
Maximum instantaneous $I_F=3A @ 25^\circ C$	V _F	0.475	0.500	0.525	V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C	I _R	0.5 15.0			mA
Typical Junction Capacitance	C _J	250	200		pF
Typical Thermal Resistance	R _{θJA}	60			°C/W
Operating Temperature Range	T _J	-55 to +125			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

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

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

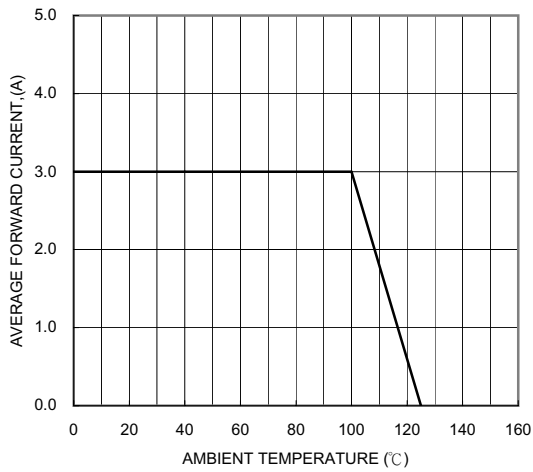


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

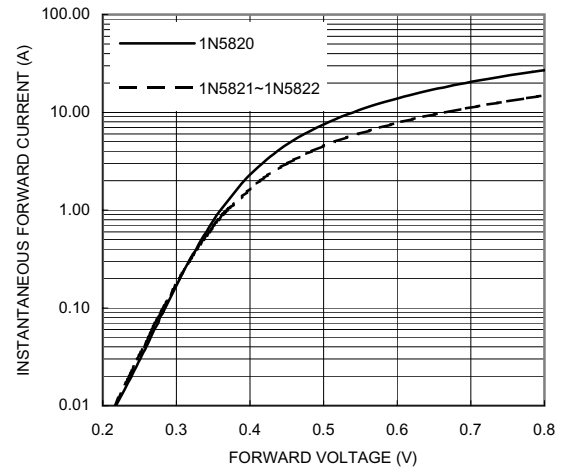


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

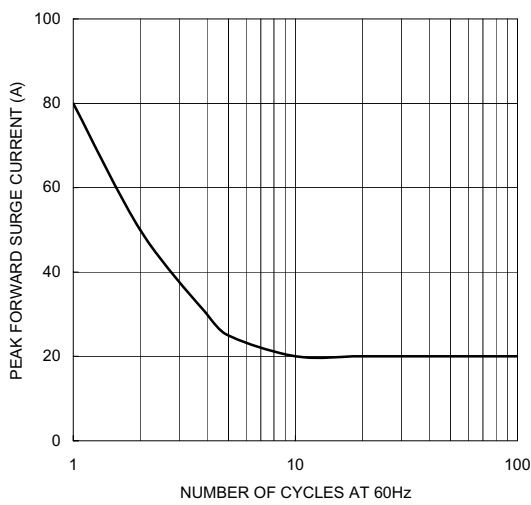


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

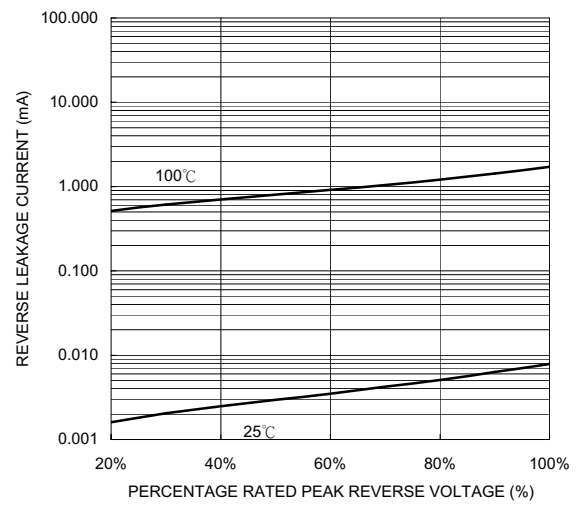


FIG. 5-TYPICAL JUNCTION CAPACITANCE

