1N5820 THRU 1N5822

SCHOTTKY BARRIER RECTIFIER

康 比 電 子
HORNBY ELECTRONIC

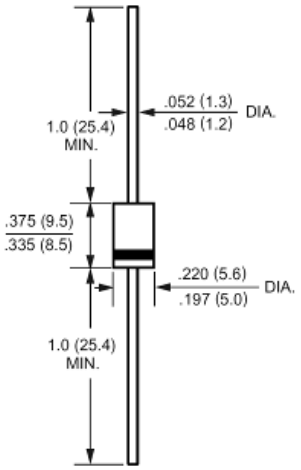
REVERSE VOLTAGE: **20 to 40 VOLTS**

FORWARD CURRENT: **3.0 AMPERE**

FEATURES

· High current capability
· 3.0 ampere operation at T_L=95℃ with no thermal runaway.
· Exceeds environmental standards of MIL-S-19500/228
· For use in low voltage, high frequency inverters free wheeling, and porlarlity protection applications

DO-201AD



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, DO-201AD
Epoxy: UL 94V-O rate flame retardant
Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
Polarity: Color band denotes cathode end
Mounting position: Any
Weight: 0.04ounce, 1.1gram

Maximum Ratings and Electrical Characteristics

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

	Symbols	*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 .375"(9.5mm) Lead Length at T_L=95℃	$I_{(AV)}$	3.0			**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80			**Amp**
Maximum Forward Voltage at 3.0A DC	V_F	0.475	0.50	0.525	**Volts**
Maximum Forward Voltage at 9.4A DC		0.850	0.90	0.950	
Maximum Reverse Current at T_A=25℃	I_R	1.0			**mAmp**
at Rated DC Blocking Voltage T_A=100℃		20			
Typical Junction Capacitance (Note 1)	C_J	250			**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	28			**℃/W**
Operating and Storage Temperature Range	T_J, Tstg	-55 to +150			**℃**

NOTES:

1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance From Junction to Ambient 0.5"(12.7mm) lead length P.C.B. Mounted.

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

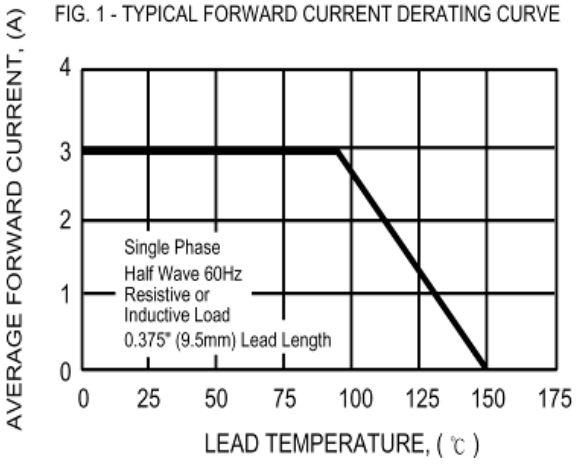

FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

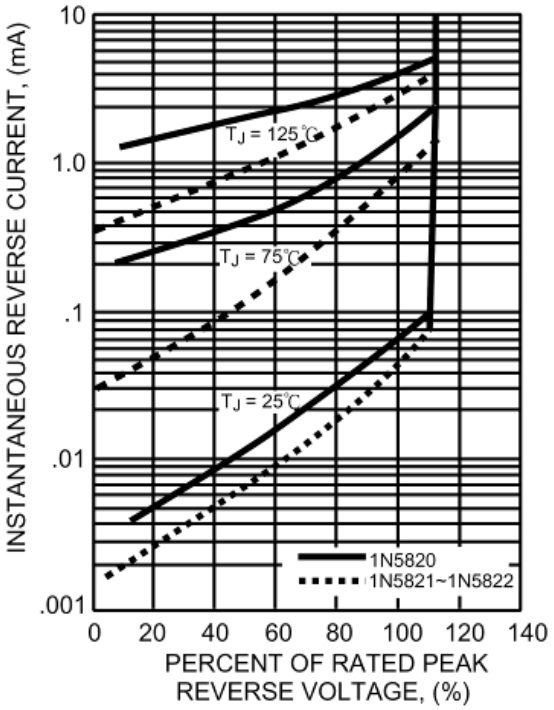

FIG. 3 - MAXIMUM NON-REPETITIVE
FORWARD SURGE CURRENT

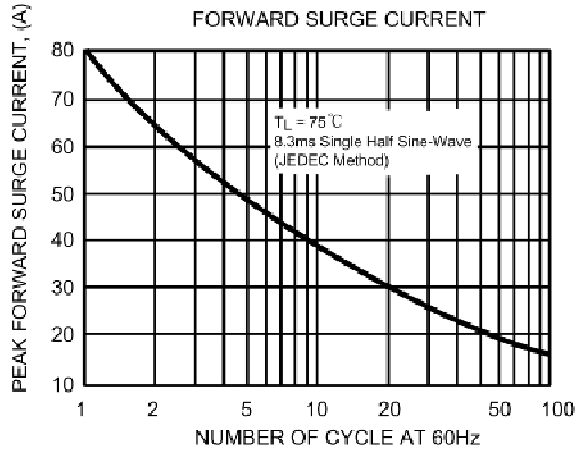

FIG. 4 - TYPICAL JUNCTION CAPACITANCE

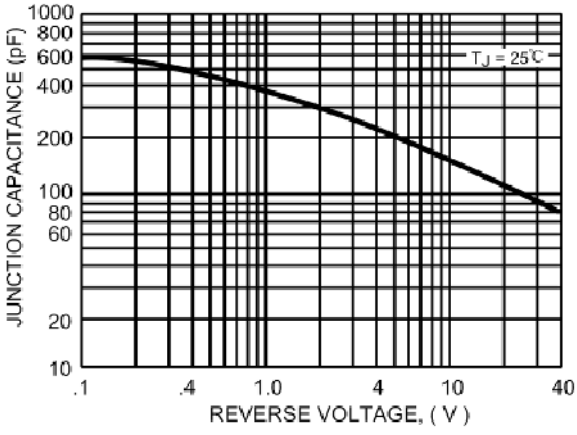

FIG. 5 - TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS