1N5820 THRU 1N5822

3 AMPERE SCHOTTKY BARRIER RECTIFIERS
VOLTAGE - 20 to 40 Volts CURRENT - 3.0 Amperes

FEATURES

- High surge current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- High current operation 3.0 ampere at $T_L = 95°C$.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and polarlity protection applications

MECHANICAL DATA

Case: Molded plastic, DO-201AD

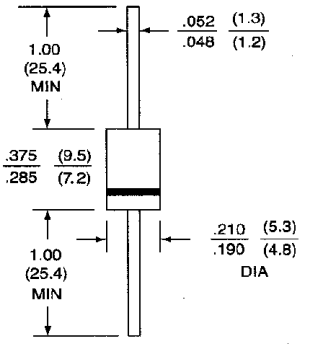
Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denotes cathode

Mounting position: Any

Weight: 0.04 ounce, 1.. grams.

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

* At $T_A = 25°C$ unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
** All values except Maximum RMS Voltage are registered JEDEC parameters.

	1N5820	1N5821	1N5822	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	V
Maximum RMS Voltage	14	21	28	V
Maximum DC Blocking Voltage	20	30	40	V
Maximum Average Forward Rectified Current 3/8″ Lead Length at $T_L = 95°C$	3.0			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) $T_L = 75°C$	80			A
Maximum Forward Voltage at 3.0A DC	.475	.500	.525	V
Maximum Forward Voltage at 9.4A DC	.850	.900	.950	V
Maximum Average DC Reverse Current $T_A = 25°C$ at Peak Reverse Voltage $T_A = 100°C$	0.5 20			mA mA
Typical Thermal Resistance (Note 1)	28			°C/W
Typical Junction Capacitance (Note 2)	190			pF
Operating Temperature Range Storage Temperature Range	-50 to +125			°C

NOTES:
1—Thermal Resistance Junction to Ambient Vertical PC Board Mounting. 1/2″ Lead Length.
2—Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

SURGE COMPONENTS, INC. 1016 GRAND BLVD., DEER PARK, NY 11729
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RATING AND CHARACTERISTIC CURVES
1N5820 THRU 1N5822

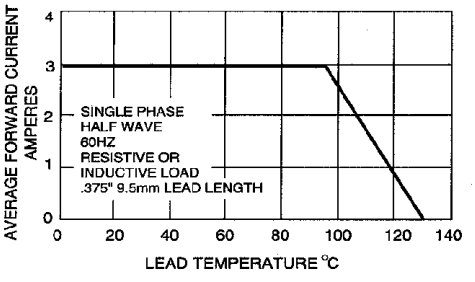

Fig. 1 – FORWARD CURRENT DERATING CURVE

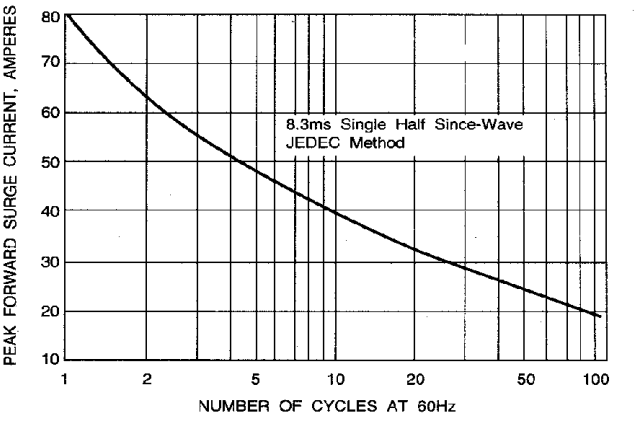

Fig. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

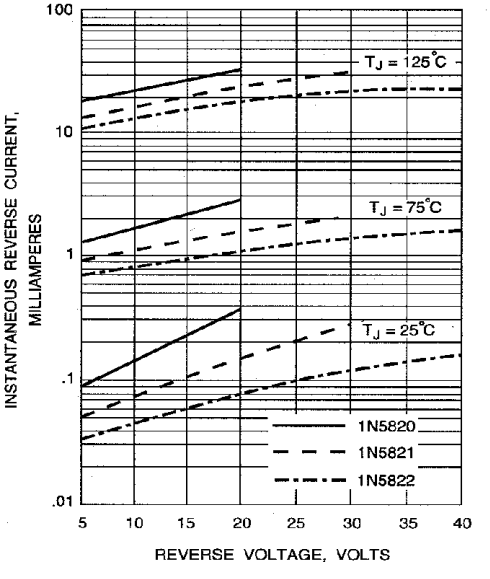

Fig. 2 – TYPICAL REVERSE CHARACTERISTICS

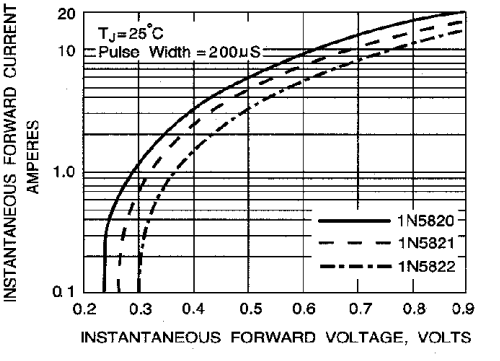

Fig. 4 – TYPICAL FORWARD CHARACTERISTICS

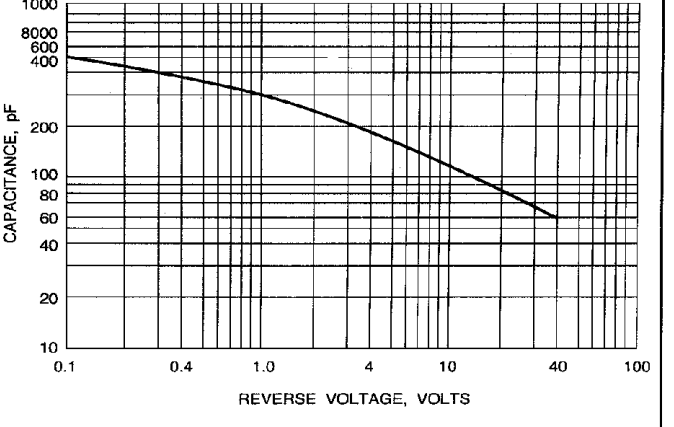

Fig. 5 – TYPICAL JUNCTION CAPACITANCE

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