1N5820 THRU 1N5822

3 AMPERE SCHOTTKY BARRIER RECTIFIER

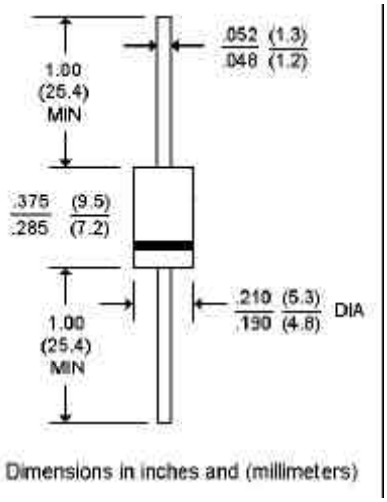
VOLTAGE - 20 to 40 Volts CURRENT - 3.0 Amperes

TRANSYS ELECTRONICS LIMITED

FEATURES

- High surge current capabi ty
- Plastic package has Underwriters Laboratory
- Flammab ity Classification 94V-O Ut izing
- Flame Retardant Epoxy Molding Compound
- High current operation 3.0 ampere at T_L=95 ¢J
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and polarlity protection app cations

DO-201AD



Dimensions in inches and (millimeters)

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, 1.1 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

*At T_A=25 ¢J unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.

**All values except Maximum RMS voltage are registered JECED 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 T_L=95 ¢J	3.0			A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JECEC method) T_L=75 ¢J	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 ¢J	0.5			mA
at Rated Reverse Voltage T_A=100 ¢J	20			mA
Typical Junction capacitance (Note 1)	28			¢J/w
Typical Thermal Resistance(Note 2)	190			pF
Operating and Storage Temperature Range	-50 to +125			¢J

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

RATING AND CHARACTERISTIC CURVES

1N5820 THRU 1N5822

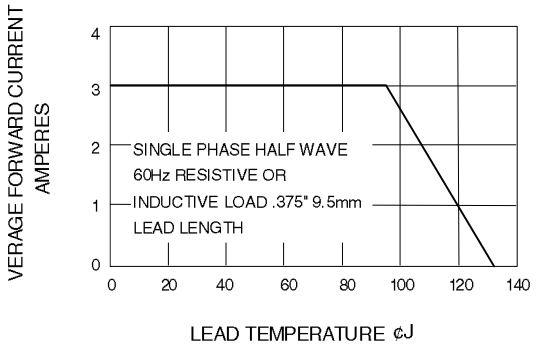


Fig. 1-FORWARD CURRENT DERATING CURVE

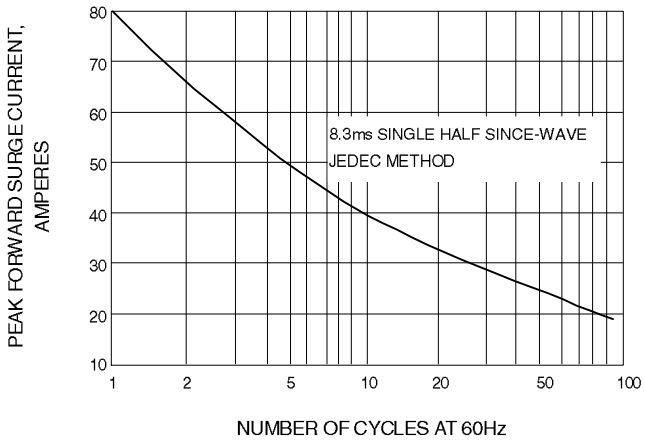


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

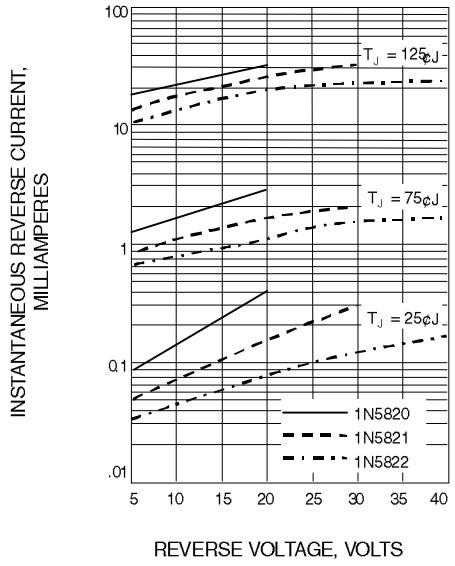


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

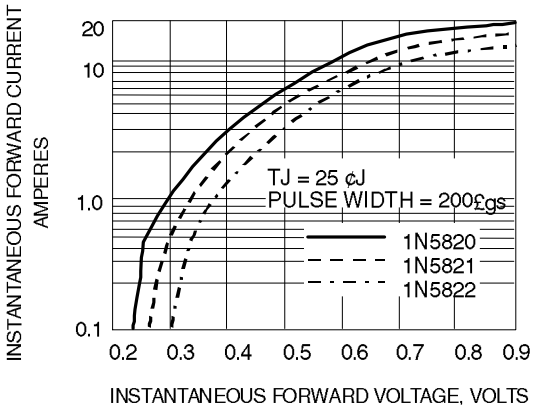


Fig. 4-TYPICAL FORWARD CHARACTERISTICS

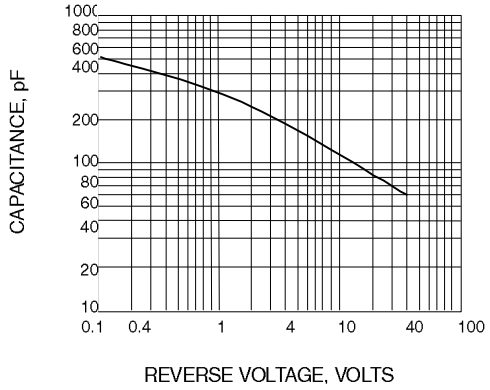


Fig. 5-TYPICAL JUNCTION CAPACITANCE