1N5817 THRU 1N5819

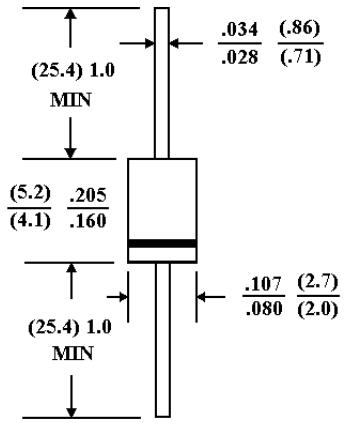
1 AMPERE SCHOTTKY BARRIER RECTIFIER

VOLTAGE - 20 to 40 Volts CURRENT - 1.0 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound
- 1.0 ampere operation at T_L=90°C with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters free wheeling, and polarlity protection applications

DO-41



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, JECEC DO-41

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

Polarity: Color Band denotes cathode

Mounting Position: Any

Weight: 0.012 ounce, 0.3 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

	1N5817	1N5818	1N5819	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=90 °C	1.0			A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JECEC method) T_L=70 °C	25			A
Maximum Forward Voltage at 1.0A DC	.45	.55	.60	V
Maximum Forward Voltage at 3.0A DC	.75	.875	.90	V
Maximum Average DC Reverse Current T_A=25 °C	0.5			mA
at Rated Reverse Voltage T_A=100 °C	10			mA
Typical Junction capacitance (Note 1)	110			pF
Typical Thermal Resistance(Note 2)	80			°C/W
Operating and Storage Temperature Range	-50 to +125			°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
2. Thermal Resistance Junction to Ambient

RATING AND CHARACTERISTIC CURVES

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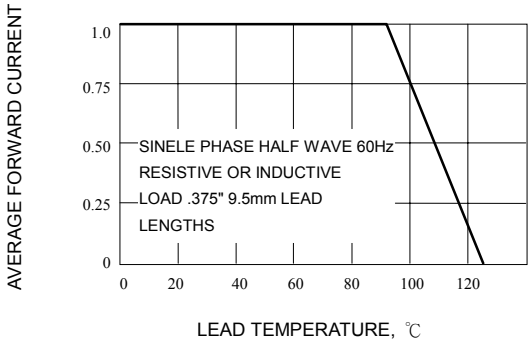

Fig. 1-FORWARD CURRENT DERATING CURVEE

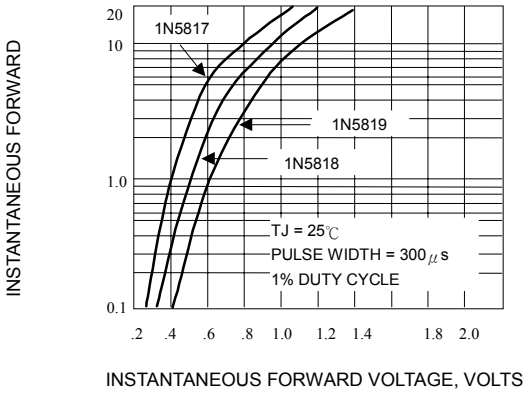

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

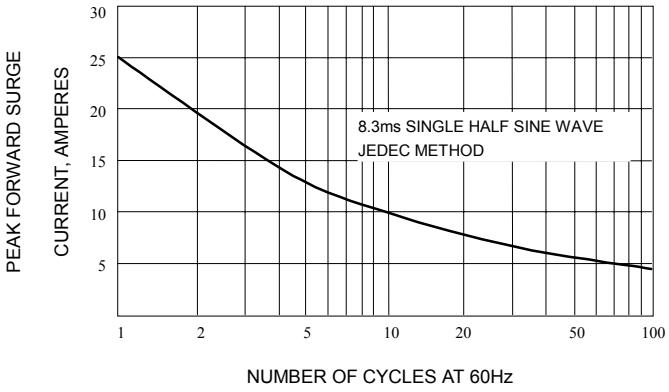

Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

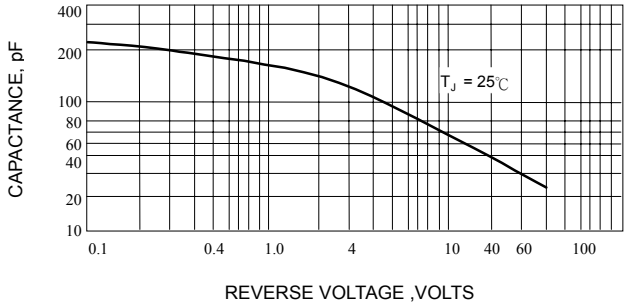

Fig. 4-TYPICAL JUNCTION CAPACITANCE