



# 1N5817H~1N5819H

## SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 40 Volts CURRENT 1.0 Ampere

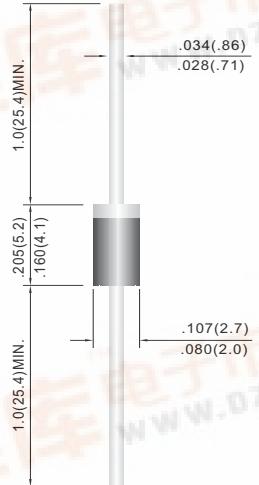
### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Pb free product : 99% Sn above can meet RoHS environment substance directive request

### MECHANICAL DATA

- Case: DO-41 Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.012 ounces, 0.3 grams

DO-41 Unit: inch(mm)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

| PARAMETER  | SYMBOL          | 1N5817H      | 1N5818H       | 1N5819H      | UNITS                       |
|--|-----------------|--------------|---------------|--------------|-----------------------------|
| Maximum Recurrent Peak Reverse Voltage   | $V_{RRM}$       | 20           | 30            | 40           | V                           |
| Maximum RMS Voltage  | $V_{RMS}$       | 14           | 21            | 28           | V                           |
| Maximum DC Blocking Voltage  | $V_{DC}$        | 20           | 30            | 40           | V                           |
| Maximum Average Forward Current .375"(9.5mm) lead length at $T_A = 90^\circ\text{C}$                       | $I_{F(AV)}$     |              | 1.0           |              | A                           |
| Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)           | $I_{FSM}$       |              | 25            |              | A                           |
| Maximum Forward Voltage at 1.0A DC<br>Maximum Forward Voltage at 3.0A DC                                   | $V_F$           | 0.47<br>0.75 | 0.55<br>0.875 | 0.60<br>0.90 | V                           |
| Maximum DC Reverse Current $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J = 100^\circ\text{C}$ | $I_R$           |              | 0.5<br>10     |              | mA                          |
| Typical Thermal Resistance   | $R_{\theta JA}$ |              | 80            |              | $^\circ\text{C} / \text{W}$ |
| Operating Junction Temperature Range   | $T_J$           |              | -50 TO +150   |              | $^\circ\text{C}$            |
| Storage Temperature Range  | $T_{STG}$       |              | -50 TO +150   |              | $^\circ\text{C}$            |



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### RATING AND CHARACTERISTIC CURVES

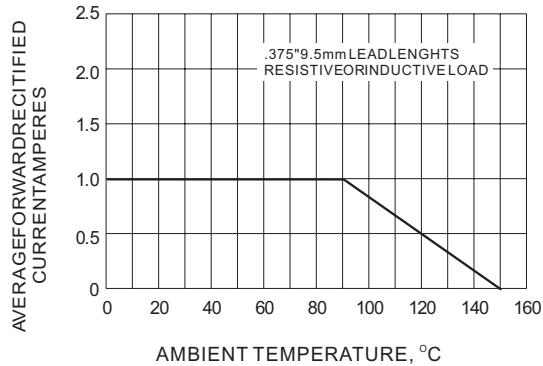


Fig.1- FORWARD CURRENT DERATING CURVE

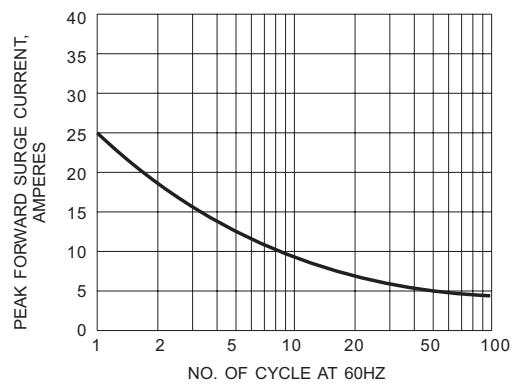


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

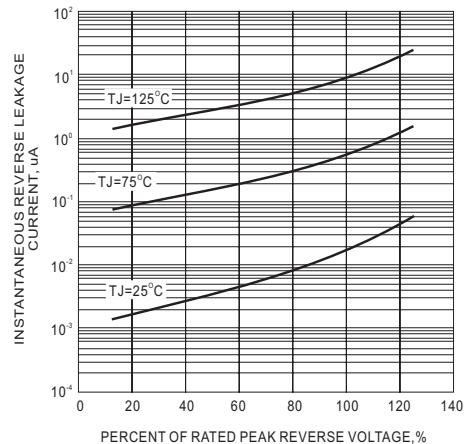


Fig.3- TYPICAL REVERSE CHARACTERISTIC

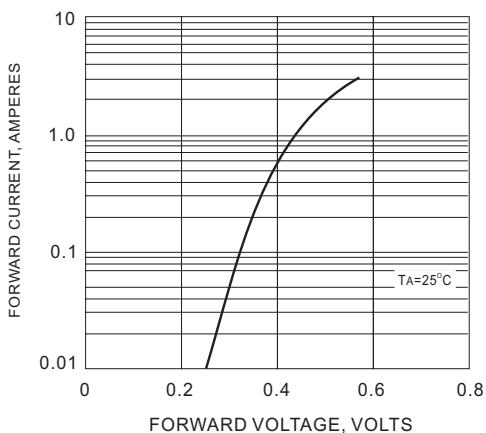


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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