



# 1N5817~1N5819

## SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 20 to 40 Volts **CURRENT** 1.0 Ampere

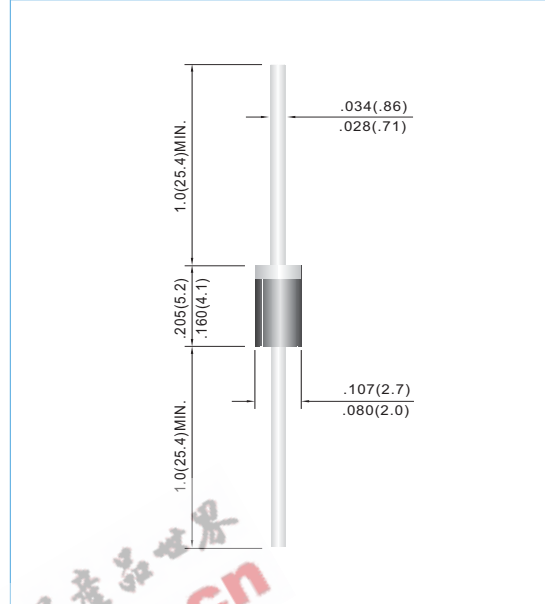
DO-41 Unit: inch(mm)

### 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 .
- In compliance with EU RoHS 2002/95/EC directives

### 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



### 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	1N5817	1N5818	1N5819	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 Maximum Forward Voltage at 3.0A DC	$V_F$	0.47 0.75	0.55 0.875	0.60 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 10			mA
Typical Thermal Resistance	$R_{\theta JA}$	80			$^\circ\text{C} / \text{W}$
Operating Junction Temperature Range	$T_J$	-50 TO +125			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-50 TO +150			$^\circ\text{C}$



# 1N5817~1N5819

## RATING AND CHARACTERISTIC CURVES

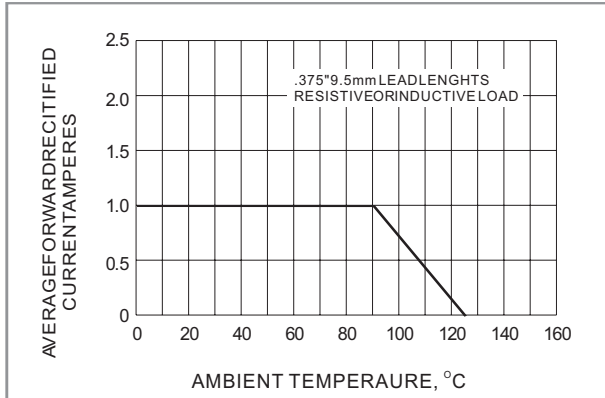


Fig.1- FORWARD CURRENT DERATING CURVE

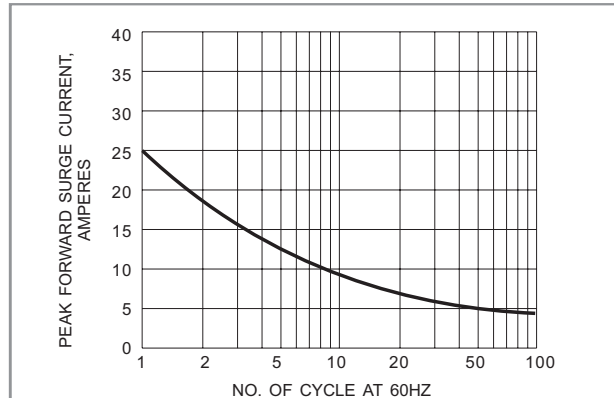


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

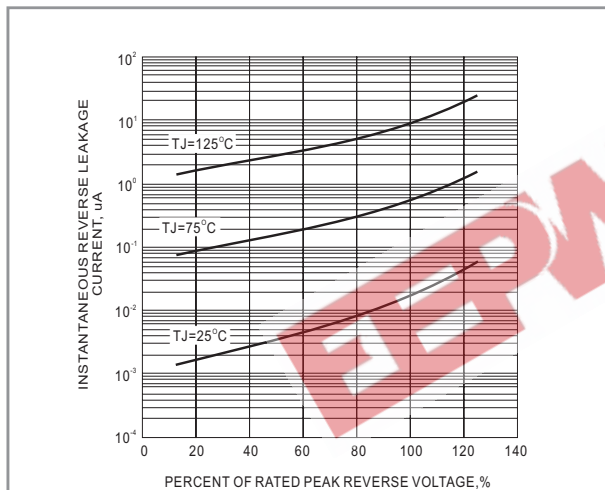


Fig.3- TYPICAL REVERSE CHARACTERISTIC

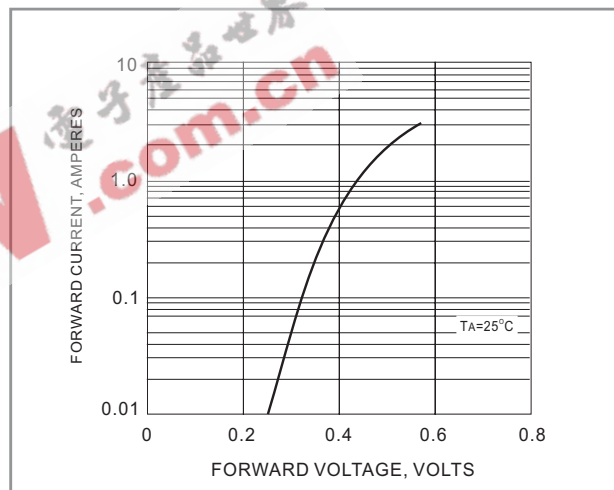


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

### LEGAL STATEMENT

#### Copyright PanJit International, Inc 2007

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.