# 1N5817 THRU 1N5819

## SCHOTTKY BARRIER RECTIFIER



REVERSE VOLTAGE: 20 to 40 VOLTS FORWARD CURRENT: 1.0 AMPERE

#### **FEATURES**

· High current capability

· Exceeds environmental standards of MIL-S-19500/228

· For use in low voltage, high frequency inverters free wheeling, and porlarlity protection applications

### **MECHANICAL DATA**

Case: Molded plastic, DO-41

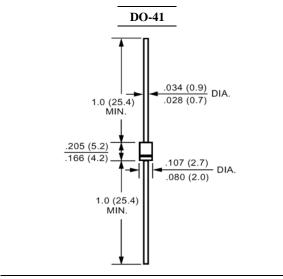
Epoxy: UL 94V-O rate flame retardant

Lead: Axial leads, solderable per MIL-STD-202,

method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting position: Any Weight: 0.012ounce, 0.33gram



**Dimensions in inches and (millimeters)** 

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

	Symbols	1N5817	1N5818	1N5819	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T <sub>L</sub> =90℃	I <sub>(AV)</sub>	1.0			Amp
Peak Forward Surge Current,					
8.3ms single half-sine-wave	$I_{FSM}$	$I_{FSM}$ 25			
superimposed on rated load (JEDEC method)					
Maximum Forward Voltage at 1.0A DC	*7	0.45	0.55	0.60	Volts
Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>	0.75	0.875	0.90	
Maximum Reverse Current at T <sub>A</sub> =25℃	т.	0.5			mAmp
at Rated DC Blocking Voltage $T_A=100$ °C	$\mathbf{I}_{\mathbf{R}}$	$I_{\mathbf{R}}$ 10			
Typical Junction Capacitance (Note 1)	$C_{J}$	110			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	80			°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , Tstg	-55 to +125			°C

#### NOTES

- 1- Measured at 1  $MH_Z$  and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance From Junction to Ambient 0.5"(12.7mm) lead length P.C.B. Mounted.





### RATINGS AND CHARACTERISTIC CURVES

