

**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **20 to 40** Volts  
FORWARD CURRENT - **1.0** Ampere

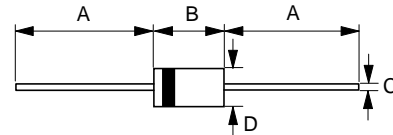
**FEATURES**

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

**MECHANICAL DATA**

- Case : JEDEC DO-41 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.012 ounces, 0.34 grams
- Mounting position : Any

**DO-41**



DO-41		
Dim.	Min.	Max.
A	25.4	-
B	4.10	5.20
C	0.71 $\varnothing$	0.86 $\varnothing$
D	2.00 $\varnothing$	2.70 $\varnothing$

All Dimensions in millimeter

**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%

CHARACTERISTICS	SYMBOL	1N5817	1N5818	1N5819	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =90°C	I <sub>(AV)</sub>	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I <sub>FSM</sub>	25			A
Maximum forward Voltage at 1.0A DC	V <sub>F</sub>	0.450	0.550	0.600	V
Maximum forward Voltage at 3.0A DC	V <sub>F</sub>	0.750	0.875	0.900	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C	I <sub>R</sub>	1			mA
@T <sub>J</sub> =100°C		10			
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	110			pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	80			°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125			°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150			°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Thermal Resistance Junction to Ambient.

REV. 2, 01-Dec-2000, KDHC01

