

CTC 1N5817-1N5819 RECTIFIER Datasheet

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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

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SCHOTTKY BARRIER RECTIFIERS

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

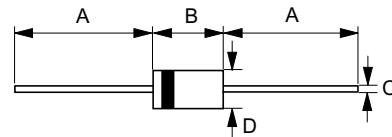
FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
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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



Dim.	DO-41	
	Min.	Max.
A	25.4	-
B	4.20	5.20
C	0.70 \varnothing	0.90 \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 _{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 Rectified Current @T _A =90°C	I(AV)	1.0			A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}	25			A
Maximum forward Voltage at 1.0A DC	V _F	0.450	0.550	0.600	V
Maximum forward Voltage at 3.0A DC	V _F	0.750	0.875	0.900	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _A =25°C @T _A =100°C	I _R	1.0 10			mA mA
Typical Junction Capacitance (Note 1)	C _J	110			pF
Typical Thermal Resistance (Note 2)	R _{θJA}	50			°C/W
Operating Temperature Range	T _J	-55 to +125			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

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

RATING AND CHARACTERISTIC CURVES

