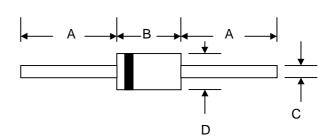


# 1N5817 - 1N5819

## 1.0A SCHOTTKY BARRIER RECTIFIER

#### **Features**

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



## **Mechanical Data**

Case: Molded Plastic

• Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 0.34 grams (approx.)

Mounting Position: Any

Marking: Type Number

DO-41						
Dim	Min	Max				
Α	25.4	_				
В	4.06	5.21				
С	0.71	0.864				
D	2.00	2.72				
All Dimensions in mm						

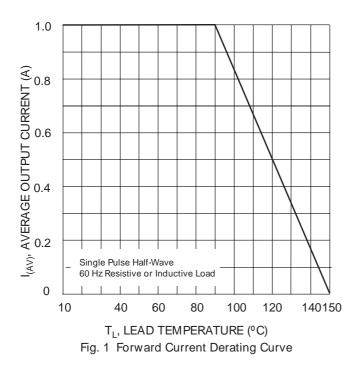
### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

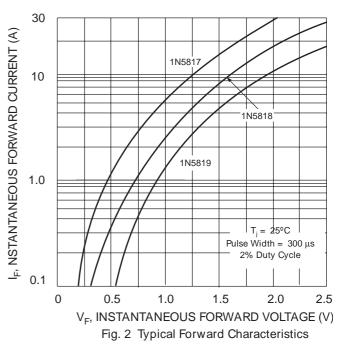
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

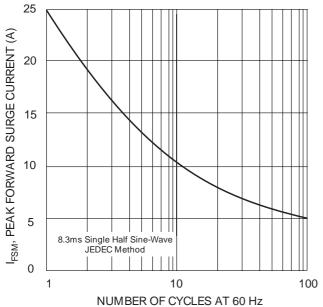
Characteristic		Symbol	1N5817	1N5818	1N5819	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		VRRM VRWM VR	20	30	40	V
RMS Reverse Voltage		VR(RMS)	14	21	28	V
Average Rectified Output Current (Note 1) @T <sub>L</sub> = 90°C		lo	1.0			А
Non-Repetitive Peak Forward Surge Current 8 Single half sine-wave superimposed on rated ( (JEDEC Method)		IFSM		25		А
Forward Voltage	$@I_F = 1.0A$ $@I_F = 3.0A$	VFM	0.450 0.750	0.550 0.875	0.60 0.90	V
Peak Reverse Current At Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C @T <sub>A</sub> = 100°C	IRM		1.0 10		mA
Typical Junction Capacitance (Note 2)		Cj	110		pF	
Typical Thermal Resistance Junction to Lead (Note 1)		$R_{ heta}_{JL}$	60		K/W	
Operating and Storage Temperature Range		Тj, Тsтg	-65 to +150		°C	

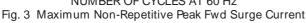
Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

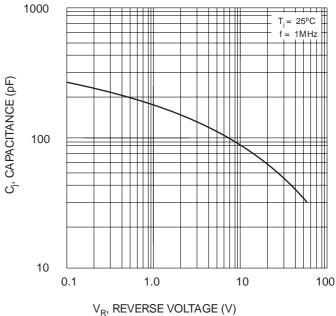
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.











V<sub>R</sub>, REVERSE VOLIAGE (V)
Fig. 4 Typical Junction Capacitance

#### **ORDERING INFORMATION**

Product No.◆	Package Type	Shipping Quantity	
1N5817-T3	DO-41	5000/Tape & Reel	
1N5817-TB	DO-41	5000/Tape & Box	
1N5817	DO-41	1000 Units/Box	
1N5818-T3	DO-41	5000/Tape & Reel	
1N5818-TB	DO-41	5000/Tape & Box	
1N5818	DO-41	1000 Units/Box	
1N5819-T3	DO-41	5000/Tape & Reel	
1N5819-TB	DO-41	5000/Tape & Box	
1N5819	DO-41	1000 Units/Box	

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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Fax: 886-7-822-5417 Email: sales@wontop.com Internet: http://www.wontop.com



Products listed in **bold** are WTE **Preferred** devices.

T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.