

**Micro Commercial Components** 



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# 1N5817 **THRU** 1N5819

### **Features**

- **Guard Ring Protection**
- Low Forward Voltage
- Low Power Loss For High Efficiency
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1 Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

## Maximum Ratings

- Operating Temperature: -55°C to +125°C Storage Temperature: -55°C to +125°C
- Maximum Thermal Resistance; 80°C/W Junction To Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N5817	20V	14V	20V
1N5818	30V	21V	30V
1N5819	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

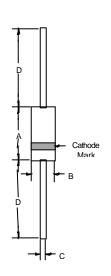
Average Forward Current	I <sub>F(AV)</sub>	1.0A	T <sub>A</sub> = 90°C
Peak Forward Surge Current	I <sub>FSM</sub>	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1N5817 1N5818 1N5819	V <sub>F</sub>	.45V .55V .60V	I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	1.0mA 10mA	$T_J = 25^{\circ}C$ $T_J = 100^{\circ}C$
Typical Junction Capacitance	C <sub>j</sub>	110pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

# 1 Amp Schottky **Barrier Rectifier** 20 to 40 Volts

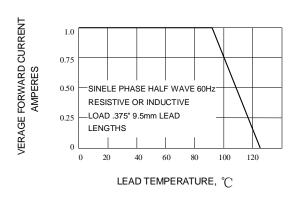




DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.166	.205	4.10	5.20		
В	.080	.107	2.00	2.70		
С	.028	.034	.70	.90		
D	1.000		25.40			

## 1N5817 thru 1N5819





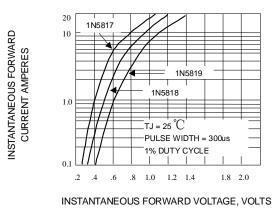


Fig. 1-FORWARD CURRENT DERATING CURVEE

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

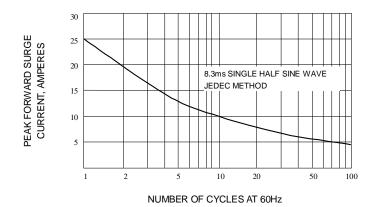


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

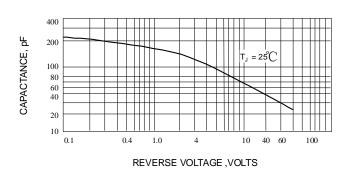


Fig. 4-TYPICAL JUNCTION CAPACITANCE



### **Ordering Information:**

Device	Packing	
Part Number-TP	Tape&Reel: 5Kpcs/Reel	
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box	
Part Number-BP	Bulk: 50Kpcs/Carton	

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