



Micro Commercial Components



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**1N5817  
THRU  
1N5819**

## Features

- Halogen free available upon request by adding suffix "-HF"
- 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)

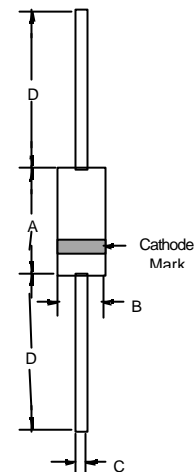
**1 Amp Schottky  
Barrier Rectifier  
20 to 40 Volts**

## 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

DO-41



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.45V .55V .60V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1.0mA 10mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Reverse Recovery Time	$T_{rr}$	10ns	$I_F=0.5\text{A}, I_R=1.0\text{A}$ $I_{RR}=0.25\text{A}$
Typical Junction Capacitance	$C_j$	110pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

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

# 1N5817 thru 1N5819

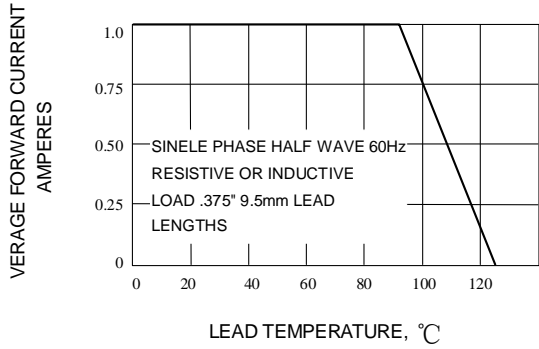


Fig. 1-FORWARD CURRENT DERATING CURVEE

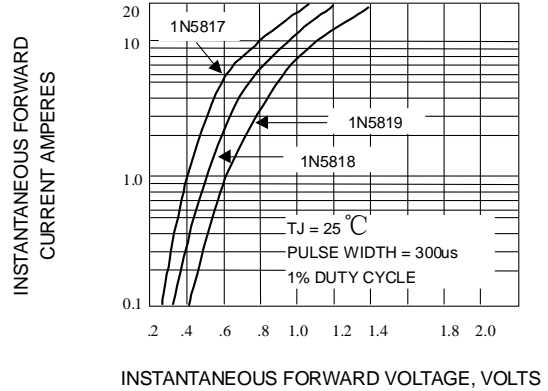


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

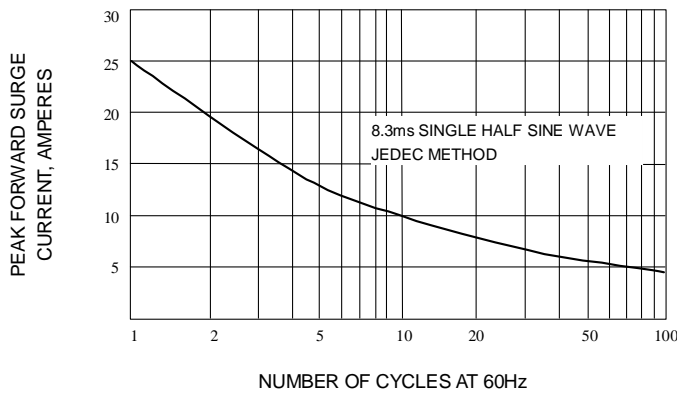


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

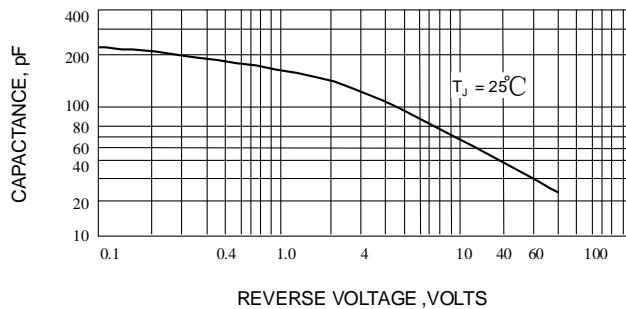


Fig. 4-TYPICAL JUNCTION CAPACITANCE



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### 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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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