

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**M·C·C·**

Micro Commercial Components



Micro Commercial Components  
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## 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)

## 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	$I_{F(AV)}$	1.0A	$T_A = 90^\circ C$
Peak Forward Surge Current	$I_{FSM}$	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$		
1N5817	.45V		$I_{FM} = 1.0A$ ;
1N5818	.55V		$T_J = 25^\circ C$ *
1N5819	.60V		
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1.0mA 10mA	$T_J = 25^\circ C$ $T_J = 100^\circ C$
Typical Junction Capacitance	$C_J$	110pF	Measured at 1.0MHz, $V_R=4.0V$

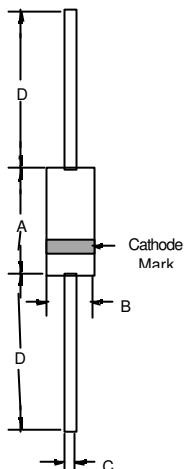
\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

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

**1N5817  
THRU  
1N5819**

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

**DO-41**



DIM	INCHES		MM		NOTE
	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	---	

**www.mccsemi.com**

## 1N5817 thru 1N5819

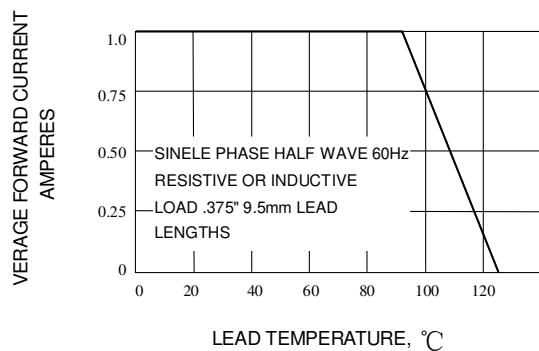


Fig. 1-FORWARD CURRENT DERATING CURVE

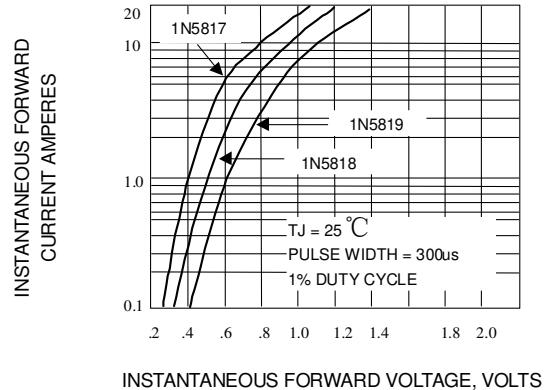


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

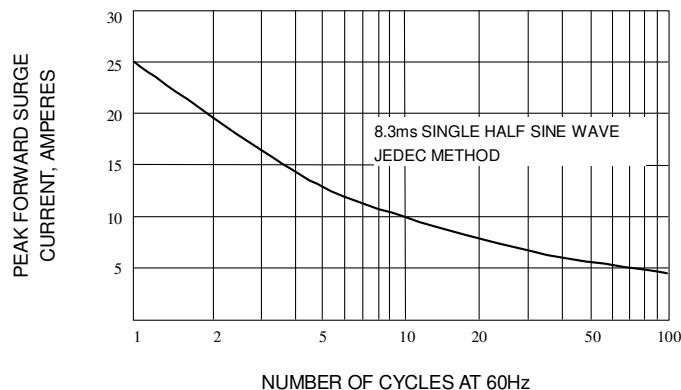


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

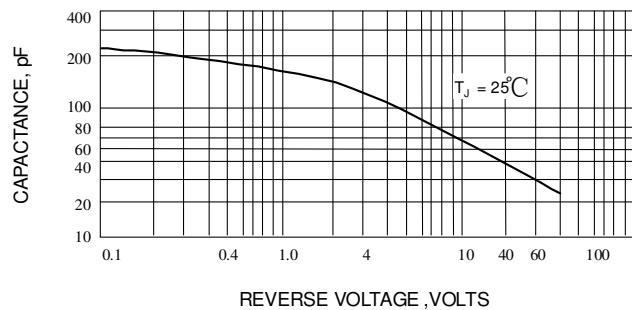


Fig. 4-TYPICAL JUNCTION CAPACITANCE



TM

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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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