



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)

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

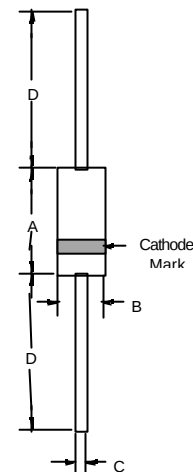
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	.45V .55V .60V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0mA 10mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
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, $V_R = 4.0\text{V}$

*Pulse test: Pulse width 300 μs , Duty cycle 2%

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

**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	---	

1N5817 thru 1N5819

M.C.C.

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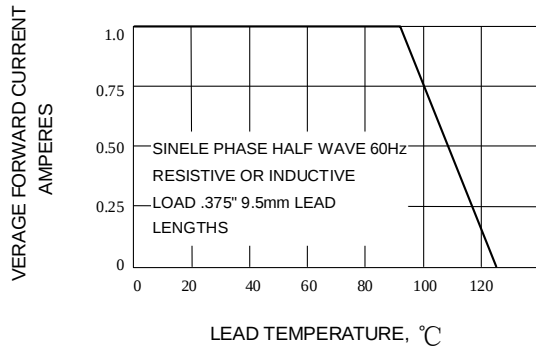


Fig. 1-FORWARD CURRENT DERATING CURVE

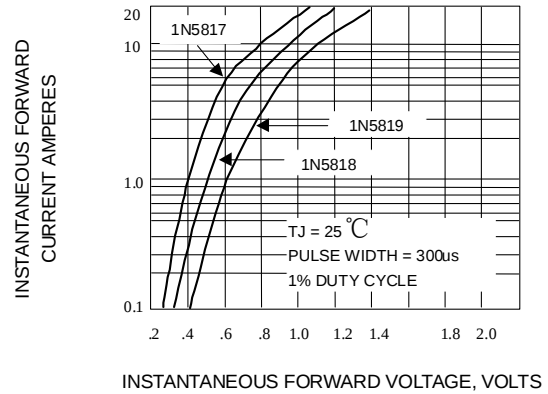


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

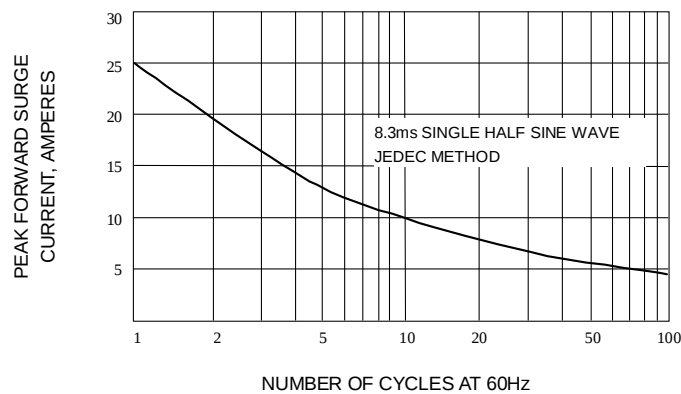


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT

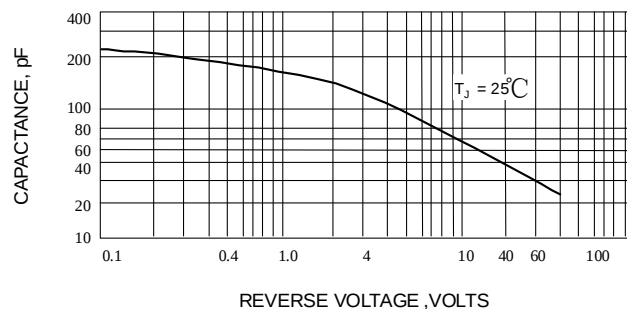


Fig. 4-TYPICAL JUNCTION CAPACITANCE

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

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

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