

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(Note 1)("P" Suffix Designates Compliant. See Ordering Information)

1.0 Amp Schottky Barrier Rectifier 20 to 40 Volts

Maximum Ratings

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

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

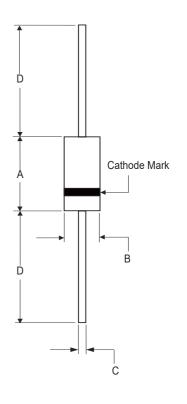
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0A	T _A = 90°C
Peak Forward Surge Current	I _{FSM}	25A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage 1N5817 1N5818 1N5819	V _F	0.45V 0.55V 0.60V	I _{FM} =1.0A; T _J =25°C*
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.1mA 10mA	T _J =25°C; T _J =100°C
Typical Reverse Recovery Time	t _{rr}	10ns	I _F =0.5A, I _R =1.0A I _{RR} =0.25A
Typical Junction Capacitance	CJ	110pF	Measured at 1.0MHz V _R =4.0V

^{*}Pulse test: Pulse width 300 μ sec, Duty cycle 2%

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

DO-41



DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.160	0.205	4.10	5.20		
В	0.080	0.107	2.00	2.70	Ф	
С	0.028	0.035	0.71	0.90	Ф	
D	1.000		25.40			



Curve Characteristics

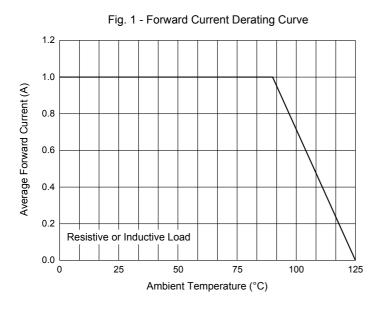


Fig. 3 - Typical Instantaneous Forward Characteristics

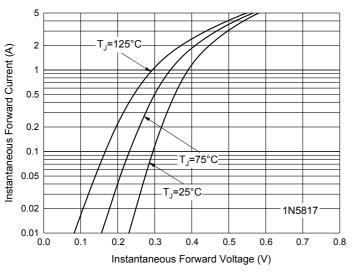


Fig. 5 - Typical Reverse Leakage Characteristics

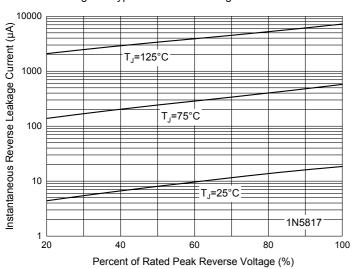


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

25
20
8.3 ms Single Half Sine-Wave
0
1 10 100
Number of Cycles at 60 Hz

Fig. 4 - Typical Instantaneous Forward Characteristics

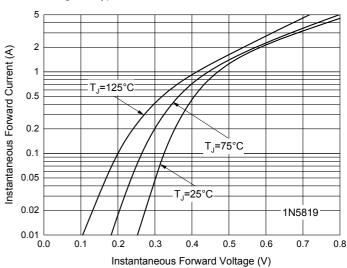
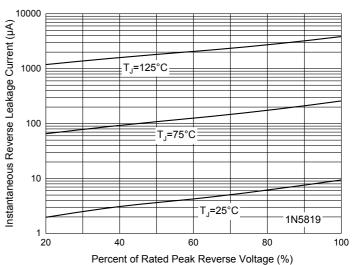


Fig. 6 - Typical Reverse Leakage Characteristics





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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