



Micro Commercial Components

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# 1N5817G THRU 1N5819G

## 1.0 Amp Schottky Barrier Rectifier 20 to 40 Volts

### Features

- Metal silicon junction, majority carrier conduction
- For surface mount application
- Low power loss, high efficiency
- High current capability, low forward voltage drop.
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

### Maximum Ratings

- Case: Molded Glass Body
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance; 30°C/W Junction To Lead  
 75°C/W Junction To Ambient

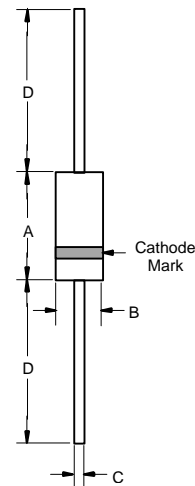
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N5817G	20V	14V	20V
1N5818G	30V	21V	30V
1N5819G	40V	28V	40V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 25^\circ\text{C}^*$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	0.5V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	1.0mA 10mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	110pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 1%

### DO-41G



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.166	0.205	4.10	7.60	
B	0.080	0.107	2.00	3.60	Diameter
C	0.026	0.034	0.70	0.90	Diameter
D	1.000	-----	25.40	-----	

# 1N5817G thru 1N5819G



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FIG. 1-FORWARD CURRENT DERATING CURVE

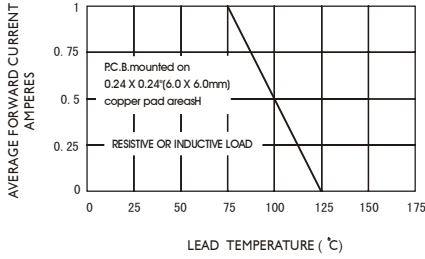


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

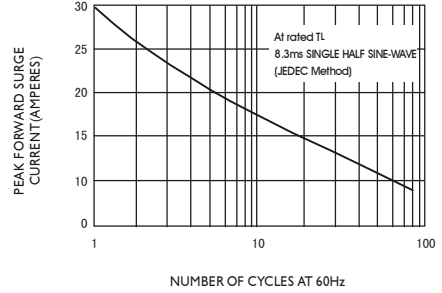


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

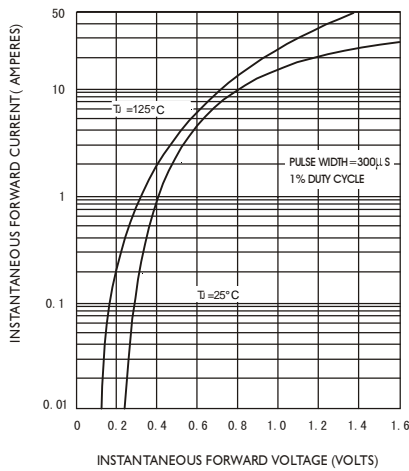


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

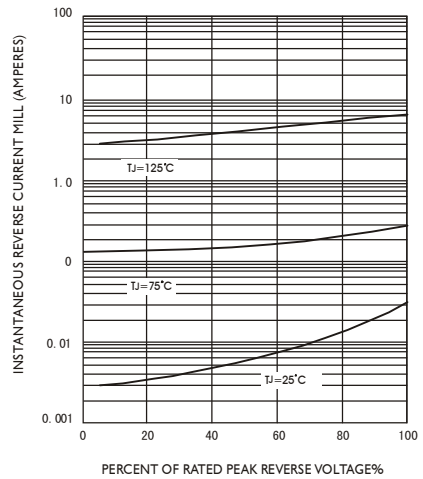


FIG. 5-TYPICAL JUNCTION CAPACITANCE

