



Micro Commercial Components

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**1N17  
 THRU  
 1N19**

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

**Features**

- High Current Capability
- Low Power loss
- High Efficiency
- Low Forward Voltage Drop
- Metal Silicon junction, majority carrier conduction
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking : Cathode band and type number

**Maximum Ratings**

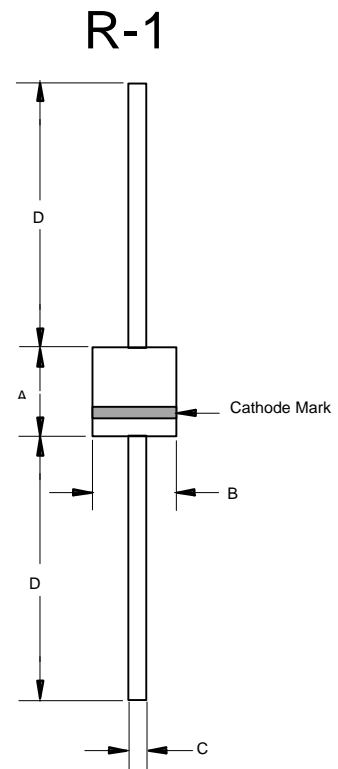
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +125°C
- Typical Thermal Resistance: 50°C/W junction to Ambient
- For capacitive load. Derate current by 20%

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N17	20V	14V	20V
1N18	30V	21V	30V
1N19	40V	28V	40V

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

Average Forward Rectified Current	$I_{(AV)}$	1.0A	$T_A = 90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1N17 0.45V	$I_{FM} = 1.0A;$ $T_C = 25^\circ\text{C}$
		1N18 0.55V	
		1N19 0.60V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 10mA	$T_C = 25^\circ\text{C}$ $T_C = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	110pF	Measured at 1.0MHz, $V_R=4.0V$

**Note:** 300 us pulse width, 1% duty cycle



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.116	0.140	2.90	3.50	
B	0.091	0.102	2.30	2.60	
C	0.020	0.024	0.50	0.60	
D	0.787	-----	20.00	-----	

# 1N17 thru 1N19

FIG.1-FORWARD CURRENT DERATING CURVE

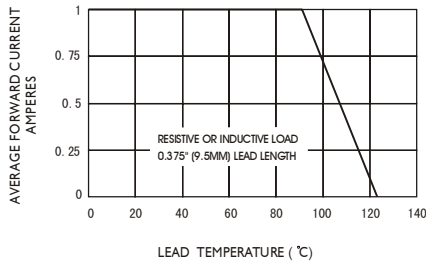


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

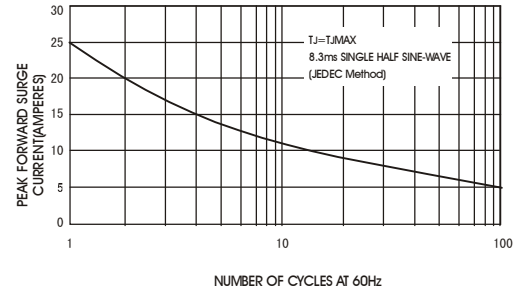


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

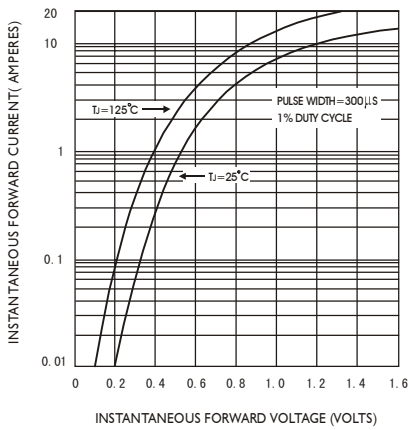


FIG.4-TYPICAL REVERSE CHARACTERISTICS

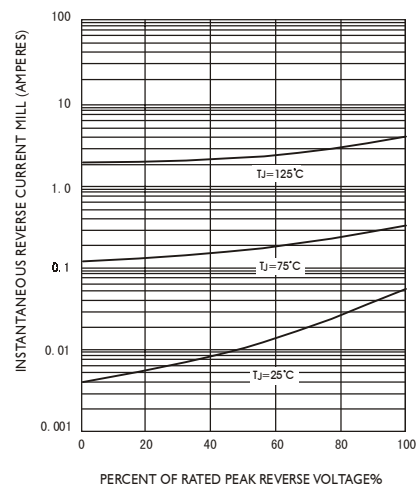


FIG.5-TYPICAL JUNCTION CAPACITANCE

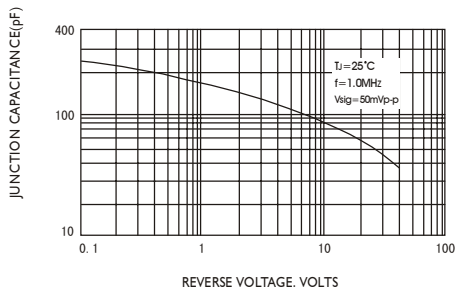
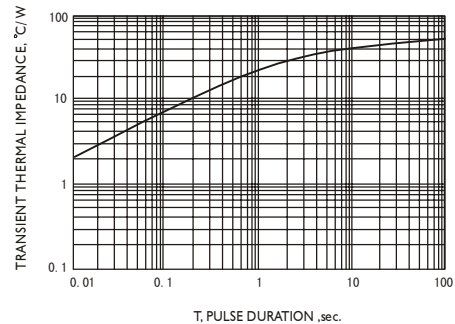


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE





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