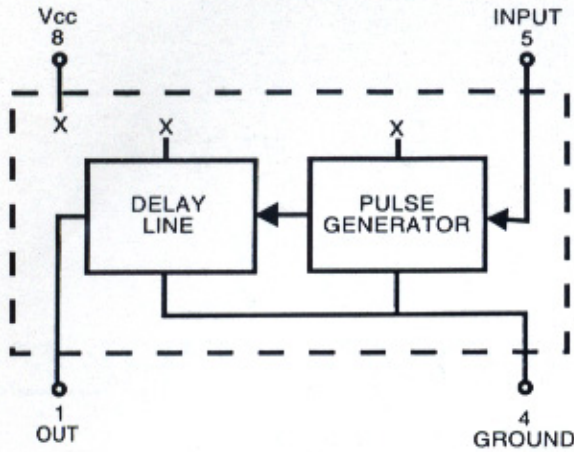
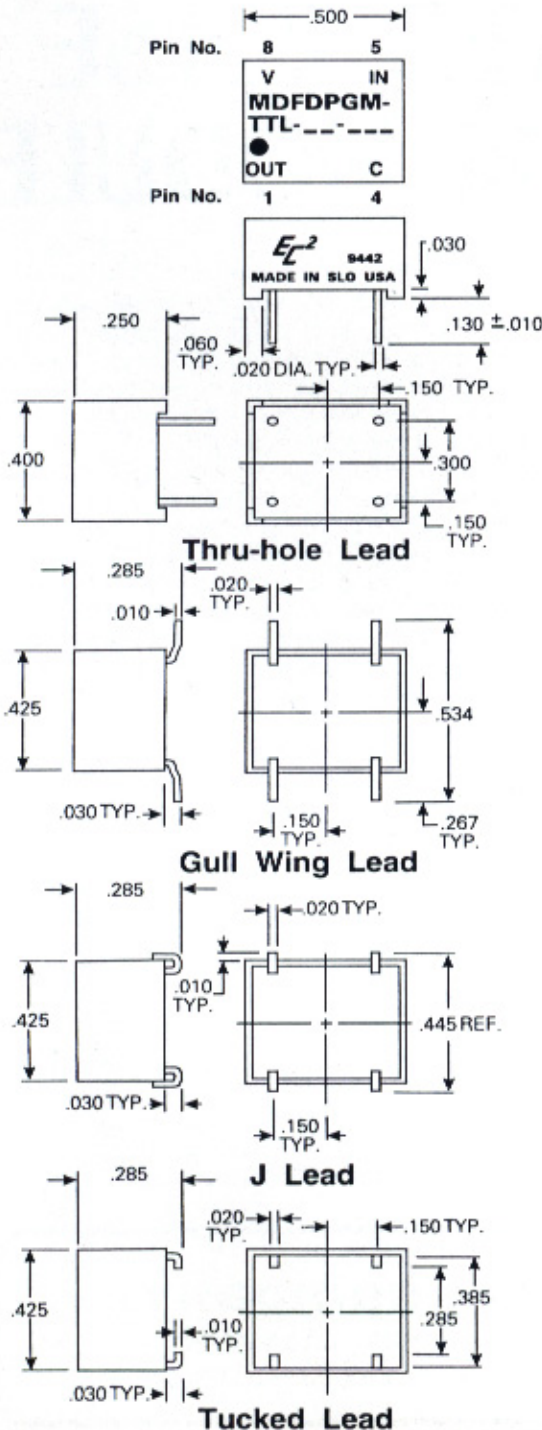


BLOCK DIAGRAM IS SHOWN BELOW



MECHANICAL DETAIL IS SHOWN BELOW



TEST CONDITIONS

1. All measurements are made at 25°C.
2. V_{CC} supply voltage is maintained at 5.0V DC.
3. All units are tested using a FAST toggle-type positive input pulse and one FAST T²L load at the output.
4. Input pulse width used is 10ns for all modules; repetition rate is approximately 200kHz.

OPERATING SPECIFICATIONS

- * V_{CC} supply voltage: 4.75 to 5.25V DC
- V_{CC} supply current:
 - Constant "0" in 30mA typical
 - Constant "1" in 30mA typical

Logic 1 Input:

- Voltage 2V min.; V_{CC} max.
- Current 2.7V = 20uA max.
- 5.5V = 1mA max.

Logic 0 Input:

- Voltage8V max.
- Current -6mA max.

- Logic 1 Voltage out: 2.7V min.
- Logic 0 Voltage out:5V max.
- Operating temperature range: 0 to 70°C.
- Storage temperature: -55 to +125°C.

* Delay increases or decreases approximately 2% for a respective increase or decrease of 5% in supply voltage. Pulse width increases or decreases approximately 2% for a respective decrease or increase of 5% in supply voltage.

PART NUMBER TABLE

Suffix Part Number with G (for Gull Wing Lead), J (for J Lead), F (for Thru-hole Lead) or T (for Tucked Lead).
 Examples: MD F D P G M - T T L - 10 G (Gull Wing), MD F D P G M - T T L - 25 J (J Lead), MD F D P G M - T T L - 70 F (Thru-hole Lead) or MD F D P G M - T T L - 100 T (Tucked Lead).

| Part Number | Pulse Width (in ns) |
|-------------------------------|---------------------|
| MD F D P G M - T T L - __ -5 | 5 ± 1 |
| MD F D P G M - T T L - __ -6 | 6 ± 1 |
| MD F D P G M - T T L - __ -7 | 7 ± 1 |
| MD F D P G M - T T L - __ -8 | 8 ± 1 |
| MD F D P G M - T T L - __ -9 | 9 ± 1 |
| MD F D P G M - T T L - __ -10 | 10 ± 1 |
| MD F D P G M - T T L - __ -15 | 15 ± 1 |
| MD F D P G M - T T L - __ -20 | 20 ± 1 |
| MD F D P G M - T T L - __ -25 | 25 ± 1 |
| MD F D P G M - T T L - __ -30 | 30 ± 1 |
| MD F D P G M - T T L - __ -35 | 35 ± 1.5 |
| MD F D P G M - T T L - __ -40 | 40 ± 1.5 |
| MD F D P G M - T T L - __ -45 | 45 ± 1.5 |
| MD F D P G M - T T L - __ -50 | 50 ± 1.5 |
| MD F D P G M - T T L - __ -60 | 60 ± 1.5 |
| MD F D P G M - T T L - __ -70 | 70 ± 2 |
| MD F D P G M - T T L - __ -75 | 75 ± 2 |
| MD F D P G M - T T L - __ -80 | 80 ± 2 |
| MD F D P G M - T T L - __ -90 | 90 ± 3 |

Complete part number includes desired delay time (in ns) from input trigger to beginning of output pulse followed by a dash, the desired pulse width and then the lead style (F, G, J, or T). Delay times are available in the same delays as shown above for pulse widths (from 6 to 90ns), e.g., part number MD F D P G M - T T L - 25 - 10 F has a delay of 25ns with a 10ns pulse and MD F D P G M - T T L - 8 - 30 J has a delay of 8ns with a 30ns pulse width. [Special modules can be readily manufactured to improve accuracies and/or provide customer specified pulse widths for specific applications.](#)