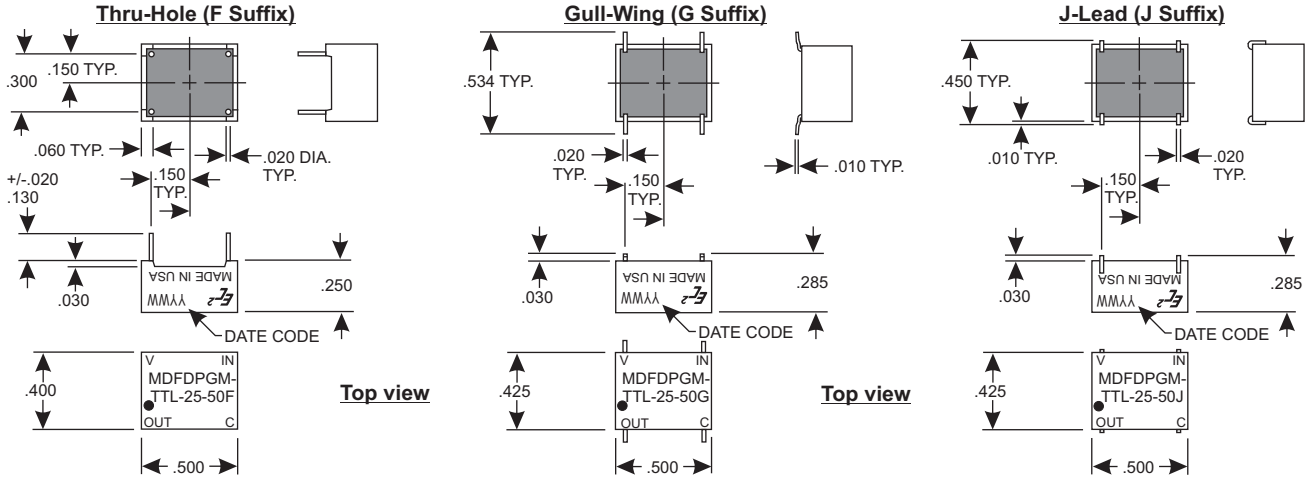
Mini DIP FAST TTL Delayed Pulse Generator Module

The Mini DIP FAST TTL Delayed Pulse Generators Modules manufactured by Engineered Components Company are designed to provide a precise output pulse width when triggered by variable pulse width inputs. These pulse generators provide a stable output pulse of the specified pulse width at the specified delay for each rising edge of the input pulse. The input pulse must be high for a minimum of 10ns. No output pulse occurs for each falling edge of the input pulse. The time between trigger inputs must be a minimum of twice the sum of the output pulse width and the delay time.

The MTBF on these modules, when calculated per MIL-HDBK-217, for a 50 deg.C ground fixed environment and with 50VDC applied, is in excess of 3 million hours. The temperature coefficient of delay is less than +/-800 ppm/deg.C over the operating temperature range of 0 to +70 deg. C.

The module is provided in a 8-pin DIP package, fully encapsulated in epoxy resin and is housed in a Diallyl Phthalate case, blue in color. The case marking is applied by silkscreen using white epoxy paint. The 4 copper leads are tin-lead plated and meet the solderability requirements of MIL-STD-202, Method 208.

MECHANICAL DIAGRAM



Product Selection Table

The complete part number includes the desired delay time (XX), followed by a dash, followed by the desired output pulse width, followed by the lead-style suffix. The delay times are available in the same delay times and tolerances as the pulse widths in the table below (5 to 100ns).

Example: The MDFDPGM-TTL-25-50J has a delay of 25 ns, a pulse width of 50 ns, and J-Leads.

(Add F Suffix for Thru-Hole Leads, G Suffix for Gull-Wing Leads, or J Suffix for J-Leads)

Part Number	Pulse Width (in ns)
MDFDPGM-TTL-XX-5	5+/-1.0
MDFDPGM-TTL-XX-6	6+/-1.0
MDFDPGM-TTL-XX-7	7+/-1.0
MDFDPGM-TTL-XX-8	8+/-1.0
MDFDPGM-TTL-XX-9	9+/-1.0
MDFDPGM-TTL-XX-10	10+/-1.0
MDFDPGM-TTL-XX-12	12+/-1.0
MDFDPGM-TTL-XX-14	14+/-1.0
MDFDPGM-TTL-XX-15	15+/-1.0
MDFDPGM-TTL-XX-17	17+/-1.0
MDFDPGM-TTL-XX-20	20+/-1.0
MDFDPGM-TTL-XX-25	25+/-1.0
MDFDPGM-TTL-XX-30	30+/-1.0
MDFDPGM-TTL-XX-35	35+/-1.5
MDFDPGM-TTL-XX-40	40+/-1.5
MDFDPGM-TTL-XX-45	45+/-1.5
MDFDPGM-TTL-XX-50	50+/-1.5
MDFDPGM-TTL-XX-60	60+/-1.5
MDFDPGM-TTL-XX-70	70+/-2.0
MDFDPGM-TTL-XX-75	75+/-2.0
MDFDPGM-TTL-XX-80	80+/-2.0
MDFDPGM-TTL-XX-90	90+/-3.0
MDFDPGM-TTL-XX-100	100+/-3.0

Special modules can often be manufactured to provide for customer specific applications.

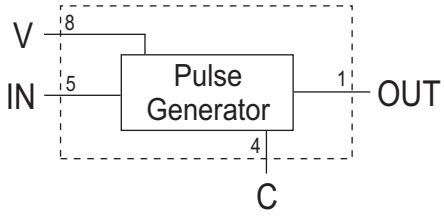
Operating Specifications:

All measurements made at 25 deg. C
All measurements made with Vcc = +5VDC
All measurements made with (1) FAST TTL output load

Operating Temperature: 0 to +70 deg. C
Storage Temperature: -55 to +125 deg. C

Vcc Supply Voltage: 4.75 to 5.25VDC
Vcc Supply Current: 30mA typical
Logic "High" Input:
  Voltage: 2.0VDC min. ; Vcc max.
  Current: 2.7VDC = 20uA max. ; 5.5VDC = 1mA max.
Logic "Low" Input:
  Voltage: 0.8 VDC max.
  Current: -0.6mA max.
Logic "High" Voltage Out: 2.7VDC min.
Logic "Low" Voltage Out: 0.5VDC max.

BLOCK DIAGRAM



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