

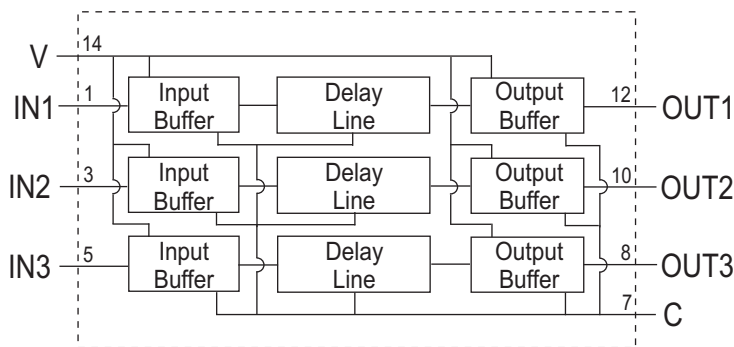
Multiple TTL Military Logic Delay Line

The Multiple TTL Military Logic Delay Lines manufactured by Engineered Components Company are designed to provide an output waveform that reproduces the input waveform after a set amount of delay time has elapsed. These delay lines are non-inverting. The delay times are calibrated to the listed tolerances on the rising edge delays. Each module consists of 3 separate delay lines, each isolated and individually buffered.

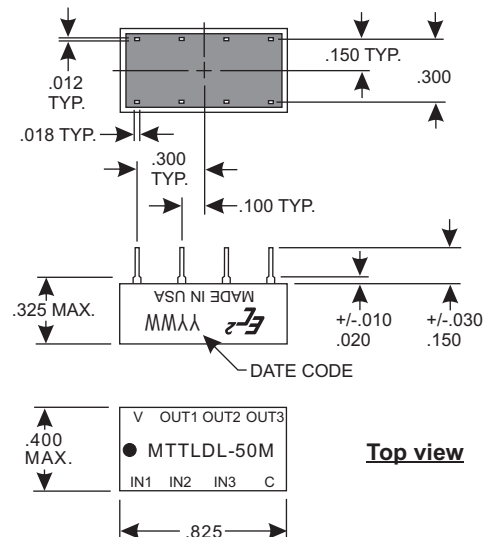
The MTBF on these modules, when calculated per MIL-HDBK-217, for a 50 deg.C ground fixed environment and with 50VDC applied, is in excess of 1.5 million hours. The temperature coefficient of delay is less than 1200 ppm/deg.C over a temperature range of -55 to +100 deg. C. These modules are designed to operate over the full military temperature range of -55 to +125 deg. C.

The module is provided in a 14-pin DIP package, fully encapsulated in epoxy resin and is housed in a Diallyl Phthalate case, red in color. The case marking is applied by silkscreen using white epoxy paint. The 8 copper leads are tin-lead plated and meet the solderability requirements of MIL-STD-202, Method 208.

BLOCK DIAGRAM



MECHANICAL DIAGRAM



Product Selection Table

Part Number	Output Delay and Tolerance (in ns)
MTTLDL-5M	5.0+/-1.0
MTTLDL-6M	6.0+/-1.0
MTTLDL-7M	7.0+/-1.0
MTTLDL-8M	8.0+/-1.0
MTTLDL-9M	9.0+/-1.0
MTTLDL-10M	10.0+/-1.0
MTTLDL-11M	11.0+/-1.0
MTTLDL-12M	12.0+/-1.0
MTTLDL-13M	13.0+/-1.0
MTTLDL-14M	14.0+/-1.0
MTTLDL-15M	15.0+/-1.0
MTTLDL-16M	16.0+/-1.0
MTTLDL-17M	17.0+/-1.0
MTTLDL-18M	18.0+/-1.0
MTTLDL-19M	19.0+/-1.0
MTTLDL-20M	20.0+/-1.0
MTTLDL-21M	21.0+/-1.0
MTTLDL-22M	22.0+/-1.0
MTTLDL-23M	23.0+/-1.0
MTTLDL-24M	24.0+/-1.0
MTTLDL-25M	25.0+/-1.0

Product Selection Table (Cont.)

Part Number	Output Delay and Tolerance (in ns)
MTTLDL-30M	30.0+/-1.5
MTTLDL-35M	35.0+/-1.5
MTTLDL-40M	40.0+/-1.5
MTTLDL-45M	45.0+/-2.0
MTTLDL-50M	50.0+/-2.0
MTTLDL-55M	55.0+/-2.0
MTTLDL-60M	60.0+/-2.0
MTTLDL-65M	65.0+/-2.5
MTTLDL-70M	70.0+/-2.5
MTTLDL-75M	75.0+/-2.5
MTTLDL-80M	80.0+/-2.5
MTTLDL-85M	85.0+/-3.0
MTTLDL-90M	90.0+/-3.0
MTTLDL-95M	95.0+/-3.0
MTTLDL-100M	100.0+/-3.0
MTTLDL-125M	125.0+/-4.0
MTTLDL-150M	150.0+/-4.5
MTTLDL-175M	175.0+/-5.0
MTTLDL-200M	200.0+/-6.0
MTTLDL-225M	225.0+/-7.0
MTTLDL-250M	250.0+/-8.0

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) TTL output load

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

Vcc Supply Voltage: 4.75 to 5.25VDC

Vcc Supply Current:

Constant "0" in = 60mA typical

Constant "1" in = 20mA typical

Logic "High" Input:

Voltage: 2.0VDC min. ; Vcc max.

Current: 2.4VDC = 50uA max. ; 5.5VDC = 1mA max.

Logic "Low" Input:

Voltage: 0.8 VDC max.

Current: -2.0mA max.

Logic "High" Voltage Out: 2.4VDC min.

Logic "Low" Voltage Out: 0.4VDC max.



engineered components company

A Division of Cornucopia Tool & Plastics, Inc. PO Box 1915, 448 Sherwood Rd., Paso Robles CA 93447

Phone: 805-369-0034

Fax: 805-369-0033

Web: www.ec2.com