

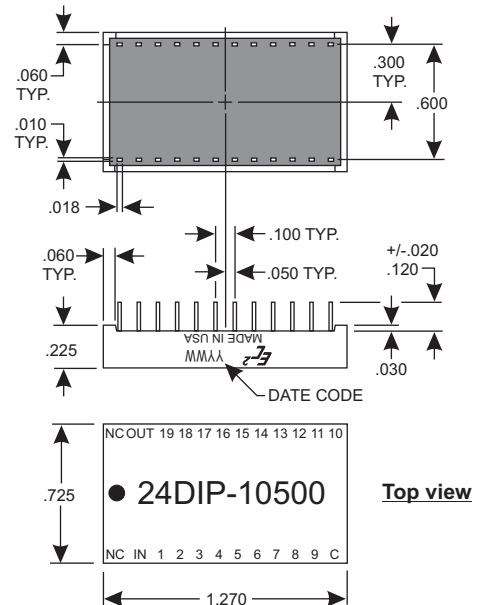
24 Pin DIP Tapped Passive Delay Line

The 24 Pin DIP Tapped Passive Delay Lines manufactured by Engineered Components Company are designed to provide precise and stable delays for analog delay line applications. These tapped delay lines are provided in a 24-pin DIP package, available in impedances of 50, 100, 200, and 500 ohms, with 20 equally spaced taps.

These delay lines are designed and tested in accordance with MIL-D-23859 and they are capable of meeting the environmental requirements of MIL-STD-202 for moisture resistance, vibration, temperature cycling, humidity, and life. The MTBF on these delay lines, when calculated per MIL-HDBK-217, for a 50 deg.C ground fixed environment and with 50VDC applied, is in excess of 12 million hours. The temperature coefficient of delay is less than 75 ppm/deg.C over the operating temperature range of -55 to +125 deg. C.

The delay line is fully encapsulated in epoxy resin and is housed in a Diallyl Phthalate case, green in color. The case marking is applied by silkscreen using white epoxy paint. The 24 beryllium copper leads are tin plated and meet the solderability requirements of MIL-STD-202, Method 208.

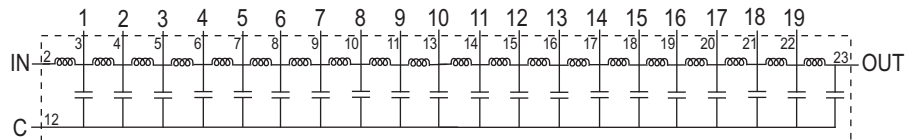
MECHANICAL DIAGRAM



Operating Specifications:

All measurements made at 25 deg. C
 Delays measured at 50% level on the leading edge
 Impedance tolerance is +/-10%
 Maximum attenuation is .5db
 Maximum distortion is +/-5%
 Maximum overshoot is 10%
 Maximum working voltage is 25VDC
 Dielectric strength is 100VDC @ 50uA
 Minimum insulation resistance is 10,000 megohms @ 100VDC

BLOCK DIAGRAM



Product Selection Table

Delay Time (nS)	*Tap Delay (nS)	50 Ohm Impedance			100 Ohm Impedance			200 Ohm Impedance			500 Ohm Impedance		
		Part Number	Rise Time (nS)	DCR (Ohms)	Part Number	Rise Time (nS)	DCR (Ohms)	Part Number	Rise Time (nS)	DCR (Ohms)	Part Number	Rise Time (nS)	DCR (Ohms)
20 +/- 1.2	1.0 +/- 0.5	24DIP-520	5	3	24DIP-1020	5	5	24DIP-2020	5	5			
30 +/- 1.5	1.5 +/- 0.5	24DIP-530	7	3	24DIP-1030	7	5	24DIP-2030	7	5			
40 +/- 2.0	2.0 +/- 0.5	24DIP-540	9	3	24DIP-1040	9	5	24DIP-2040	9	5	24DIP-5040	14	7
50 +/- 2.5	2.5 +/- 0.6	24DIP-550	10	3	24DIP-1050	10	5	24DIP-2050	10	5	24DIP-5050	16	7
60 +/- 3.0	3.0 +/- 0.6	24DIP-560	12	5	24DIP-1060	12	5	24DIP-2060	12	5	24DIP-5060	19	7
80 +/- 4.0	4.0 +/- 0.8	24DIP-580	15	5	24DIP-1080	16	5	24DIP-2080	16	5	24DIP-5080	22	7
100 +/- 5.0	5.0 +/- 1.0	24DIP-5100	19	5	24DIP-10100	18	5	24DIP-20100	18	5	24DIP-50100	26	9
120 +/- 5.5	6.0 +/- 1.2	24DIP-5120	21	5	24DIP-10120	20	5	24DIP-20120	20	5	24DIP-50120	30	9
140 +/- 6.0	7.0 +/- 1.4	24DIP-5140	23	5	24DIP-10140	22	5	24DIP-20140	24	7	24DIP-50140	34	9
150 +/- 7.0	7.5 +/- 1.5	24DIP-5150	25	5	24DIP-10150	23	5	24DIP-20150	25	7	24DIP-50150	35	9
160 +/- 8.0	8.0 +/- 1.6	24DIP-5160	26	5	24DIP-10160	25	5	24DIP-20160	26	7	24DIP-50160	36	9
180 +/- 9.0	9.0 +/- 1.8	24DIP-5180	28	5	24DIP-10180	27	5	24DIP-20180	28	7	24DIP-50180	39	12
200 +/- 10.0	10.0 +/- 2.0	24DIP-5200	30	5	24DIP-10200	30	5	24DIP-20200	30	7	24DIP-50200	44	12
250 +/- 12.0	12.5 +/- 2.2	24DIP-5250	36	5	24DIP-10250	36	5	24DIP-20250	38	7	24DIP-50250	50	12
300 +/- 14.0	15.0 +/- 2.5	24DIP-5300	44	5	24DIP-10300	42	7	24DIP-20300	44	9	24DIP-50300	55	12
350 +/- 16.0	17.5 +/- 2.7	24DIP-5350	50	5	24DIP-10350	50	7	24DIP-20350	50	9	24DIP-50350	62	14
400 +/- 18.0	20.0 +/- 3.0	24DIP-5400	60	5	24DIP-10400	55	7	24DIP-20400	58	9	24DIP-50400	72	14
450 +/- 19.0	22.5 +/- 3.2	24DIP-5450	62	5	24DIP-10450	62	7	24DIP-20450	65	9	24DIP-50450	78	24
500 +/- 20.0	25.0 +/- 3.5	24DIP-5500	65	5	24DIP-10500	70	7	24DIP-20500	72	12	24DIP-50500	85	24
600 +/- 22.0	30.0 +/- 3.8	24DIP-5600	80	5	24DIP-10600	85	7	24DIP-20600	85	12	24DIP-50600	95	24
700 +/- 24.0	35.0 +/- 4.0	24DIP-5700	90	7	24DIP-10700	100	9	24DIP-20700	100	12	24DIP-50700	105	30
800 +/- 26.0	40.0 +/- 4.2	24DIP-5800	100	7	24DIP-10800	115	9	24DIP-20800	115	14	24DIP-50800	115	30
900 +/- 28.0	45.0 +/- 4.5	24DIP-5900	110	7	24DIP-10900	130	9	24DIP-20900	130	14	24DIP-50900	130	36
1000 +/- 30.0	50.0 +/- 5.0	24DIP-51000	140	7	24DIP-101000	140	9	24DIP-201000	160	14	24DIP-501000	140	36

*Referenced from the input of the delay line.

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



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