

14 Pin DIP Tapped Passive Delay Line

The 14 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 low-profile 14-pin DIP package, available in impedances of 50, 100, and 200 ohms, with 10 equally spaced taps.

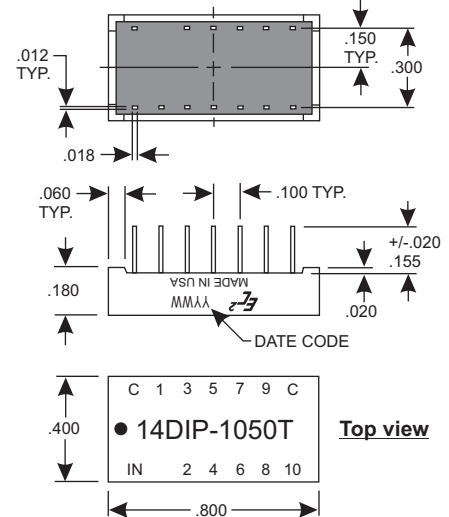
These delay lines are designed and tested in accordance with MIL-D-23859 and they are capable of meeting the environmental requirements of MIL-STD-202 for moisture resistance, vibration, temperature cycling, humidity, and life. The MTBF on these delay lines, when calculated per MIL-HDBK-217, for a 50 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 13 beryllium copper leads are tin plated and meet the solderability requirements of MIL-STD-202, Method 208.

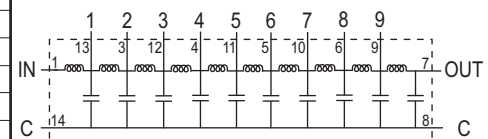
Product Selection Table

Part Number	Delay Time (nS)	Rise Time (nS)	* Tap Delay (nS)	Impedance (Ohms)	DCR (Ohms)
14DIP-505T	5.0+/-0.5	2.0	0.5+/-0.2	50	1.5
14DIP-510T	10.0+/-0.7	3.5	1.0+/-0.5	50	1.5
14DIP-515T	15.0+/-1.0	4.5	1.5+/-0.5	50	1.5
14DIP-520T	20.0+/-1.2	5.5	2.0+/-0.5	50	1.5
14DIP-525T	25.0+/-1.5	6.5	2.5+/-0.6	50	1.5
14DIP-530T	30.0+/-1.5	8.0	3.0+/-0.6	50	1.5
14DIP-535T	35.0+/-2.0	9.0	3.5+/-0.8	50	2.0
14DIP-540T	40.0+/-2.0	11.0	4.0+/-0.8	50	2.0
14DIP-545T	45.0+/-2.5	12.0	4.5+/-1.0	50	2.0
14DIP-550T	50.0+/-2.5	13.0	5.0+/-1.0	50	2.5
14DIP-560T	60.0+/-3.0	15.0	10.0+/-1.2	50	2.5
14DIP-570T	70.0+/-3.5	18.5	15.0+/-1.4	50	2.5
14DIP-580T	60.0+/-4.0	21.0	10.0+/-1.6	50	3.0
14DIP-590T	70.0+/-4.5	22.0	15.0+/-1.8	50	3.0
14DIP-5100T	100.0+/-5.0	22.0	20.0+/-2.0	50	3.0
14DIP-5150T	150.5+/-6.5	32.0	30.0+/-2.5	50	3.0
14DIP-5200T	200.0+/-10.0	40.0	40.0+/-3.0	50	3.0
14DIP-1005T	5.0+/-0.5	2.0	0.5+/-0.2	100	1.0
14DIP-1010T	10.0+/-0.7	3.5	1.0+/-0.5	100	1.0
14DIP-1015T	15.0+/-1.0	5.0	1.5+/-0.5	100	1.0
14DIP-1020T	20.0+/-1.2	5.0	2.0+/-0.5	100	1.5
14DIP-1025T	25.0+/-1.5	7.0	2.5+/-0.6	100	1.5
14DIP-1030T	30.0+/-1.5	8.0	3.0+/-0.6	100	1.5
14DIP-1040T	40.0+/-2.0	11.0	4.0+/-0.8	100	1.5
14DIP-1050T	50.0+/-2.5	12.5	5.0+/-1.0	100	1.5
14DIP-1060T	60.0+/-3.0	12.5	6.0+/-1.2	100	2.0
14DIP-1070T	70.0+/-3.5	18.5	7.0+/-1.4	100	2.0
14DIP-1080T	80.0+/-4.0	20.0	8.0+/-1.6	100	2.0
14DIP-1090T	90.0+/-4.5	22.0	9.0+/-1.8	100	2.0
14DIP-10100T	100.0+/-5.0	24.0	10.0+/-2.0	100	2.0
14DIP-10150T	150.0+/-6.5	32.0	15.0+/-2.5	100	2.0
14DIP-2010T	10.0+/-0.7	3.5	1.0+/-0.5	200	2.0
14DIP-2020T	20.0+/-1.2	6.0	2.0+/-0.6	200	2.0
14DIP-2025T	25.0+/-1.5	7.0	2.5+/-0.6	200	2.0
14DIP-2030T	30.0+/-1.5	8.0	3.0+/-0.6	200	2.0
14DIP-2040T	40.0+/-2.0	10.0	4.0+/-0.8	200	2.5
14DIP-2050T	50.0+/-2.5	12.0	5.0+/-1.0	200	2.5
14DIP-2060T	60.0+/-3.0	14.0	6.0+/-1.2	200	2.5
14DIP-2080T	80.0+/-4.0	19.0	8.0+/-1.6	200	3.0
14DIP-20100T	100.0+/-5.0	24.0	10.0+/-2.0	200	3.0

MECHANICAL DIAGRAM



BLOCK 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

*Referenced from the input of the delay line.

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



engineered components company

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