PASSIVE DELAY LINES, DIP PACKAGE

P1410 SERIES - 14 PIN, 10 TAP

P2420 SERIES - 24 PIN, 20 TAP

RESISTORS ◆CAPS & COILS ◆DELAY LINES

FEATURES

- ❒ Economical cost, prompt delivery!
- ❒ Wide variety of values, 10nS to 1000nS
- ❒ Precision-grade internal inductor elements ensure excellent stability
- ❒ Fast rise times
- ❒ Operating temperature: 0°C to 70°C

OPTIONS

- ❒ Custom circuits available
- ❒ Non-standard delay or impedance values
- ❒ Tighter tolerance or temperature coefficient
- ❒ Internal resistor termination
- ❒ Faster rise times!
- ❒ Military screening per MIL-D-83531

TEST CONDITIONS @25°C

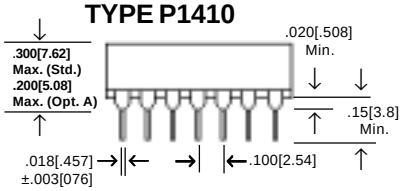
1.) Input test pulse shall have an amplitude of 3.2V, rise time of 2nS, and pulse width of 3x total delay.
2.) Delay line to be terminated to within 1% of its characterstic impedance.

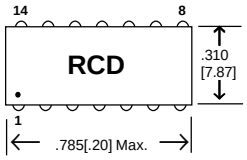
RCD's P1410 and P2420 passive (analog) delay line series are a lumped constant design per applicable portions of MIL-D-23859. The series incorporates high performance inductors and multi-layer capacitors in a molded DIP package, ensuring stable transmission, low temperature coefficient, and excellent environmental performance.

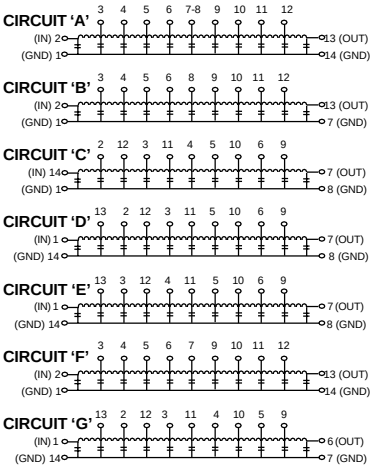
ELECTRICAL CHARACTERISTICS

Total Delay Tolerance	±5% or ±2nS (whichever is greater)
Tap Delay Tolerance	±10% or ±1nS (whichever is greater)
Temperature Coefficient	100ppm/°C Max.
Insulation Resistance	1000MΩ min.
Dielectric Strength	100VDC
Distortion	±10% Max.

TYPE P1410





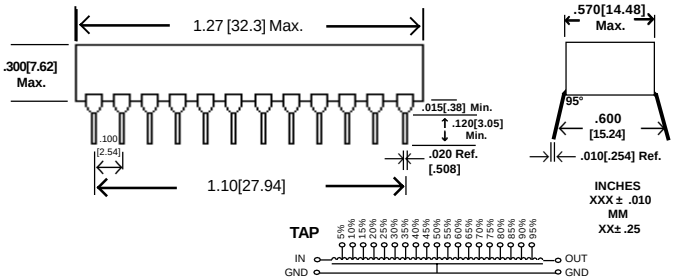


TYPE P1410, 14 PIN 10 TAPS

Total Delay (nSec)	Rise Time Max.[1] (nSec)	Delay per TAP (nSec)	Attenuation Max. (%)	Available Impedance Values (±10%)*
10	3.0	1	5	50Ω, 100Ω
20	4.5	2	5	50Ω, 100Ω, 200Ω
30	6.0	3	5	50Ω, 100Ω, 200Ω
40	7.0	4	5	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
50	8.5	5	7	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
60	10	6	7	50Ω, 100Ω, 200Ω, 300Ω,500Ω
75	12.5	7.5	7	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
100	17	10	7	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
120	20	12	8	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
150	25	15	8	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
180	30	18	8	50Ω, 100Ω, 200Ω, 300Ω,500Ω
200	34	20	8	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
220	37	22	8	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
250	42	25	8	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
300	50	30	10	50Ω, 100Ω, 200Ω, 300Ω, 500Ω
375	62.5	37.5	10	50Ω, 100Ω, 200Ω, 300Ω,500Ω
500	85	50	12	50Ω, 100Ω, 200Ω, 300Ω,
600	100	60	15	50Ω, 100Ω, 200Ω, 300Ω,
750	125	75	16	50Ω, 100Ω, 200Ω
1000	170	100	16	50Ω, 100Ω

[1] Faster rise times available! * 100Ω is the most common impedance value.

TYPE P2420



TYPE P2420, 24 PIN 20 TAPS

Total Delay (nSec)	Rise Time Max.[1] (nSec)	Delay per TAP (nSec)	Attenuation Max. (%)	Available Impedance Values (±10%)*
20	3	1	5	50Ω, 100Ω
40	4	2	8	50Ω, 100Ω, 200Ω
60	6	3	8	50Ω, 100Ω, 200Ω
80	8	4	8	50Ω, 100Ω, 200Ω
100	10	5	8	50Ω, 100Ω, 200Ω
200	20	10	8	50Ω, 100Ω, 200Ω
300	30	15	8	100Ω, 200Ω
400	40	20	10	100Ω, 200Ω
500	50	25	10	100Ω, 200Ω
600	60	30	10	100Ω, 200Ω
800	80	40	10	100Ω, 200Ω
1000	100	50	10	100Ω, 200Ω

[1] Faster rise times available! * 100Ω is the most common impedance value.

P2420 STANDARD CIRCUITS

		TAP NUMBER																					
CIRCUIT	IN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	OUT	GND
A	2	3	4	5	6	7	8	9	10	11	12	14	15	16	17	18	19	20	21	22	23	1, 24
B	2	3	4	5	6	7	8	9	10	11	13	14	15	16	17	18	19	20	21	22	23	12
C	1	2	3	4	5	6	7	8	9	10	11	14	15	16	17	18	19	20	21	22	23	12, 24
D	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	1, 24

P/N DESIGNATION:

P1410 A - 100nS - 101 C B

- **RCD Type** (P1410, P2420)
- **Low Profile Option** (P1410 only)
- **Total Delay** Impedance in 3-digit code: 50R=50Ω, 101=100Ω
- **Circuit** (A, B, C, D, E, F, G)
- **Packaging**: B = Bulk

RCD Components Inc., 520 E. Industrial Park Dr., Manchester, NH USA 03109
Tel: (603) 669-0054 Fax:(603) 669-5455 E-mail: sales@rcdcomponents.com *www.rcdcomponents.com*

FA specification subject to change without notice