



RESISTORS • CAPACITORS • COILS • DELAY LINES

PASSIVE DIP DELAY LINES, TAPPED

- SMP1410** - 14 PIN, 10 TAP SM
- P0805** - 8 PIN, 5 TAP DIP & SM
- P1410** - 14 PIN, 10 TAP DIP & SM
- P2420** - 24 PIN, 20 TAP DIP & SM



Term.W is RoHS compliant



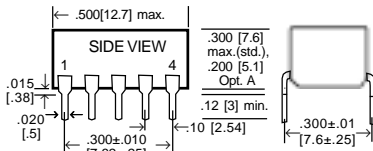
RCD's passive delay line series are a lumped constant design incorporating high performance inductors and capacitors in a molded DIP package. Provides stable transmission, low TC, and excellent environmental performance (application handbook avail.).

- Low cost and the industry's widest range, 5-5000nS
- Custom circuits, delay/rise times, impedance available
- Military screening per MIL-PRF-83531avail
- Option A: low profile package height
- Option G: gull wing lead wires for SM applications

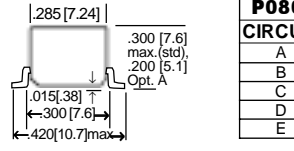
TEST CONDITIONS @25°C

Input test pulse shall have a pulse amplitude of 2.5V, rise time of 2nS, pulse width of 5X total delay. Delay line to be terminated <1% of its characteristic impedance. Delay time measured from 50% of input pulse to 50% of output pulse on leading edge with no loads on output. Rise time measured from 10% to 90% of output pulse.

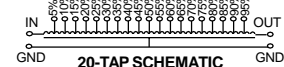
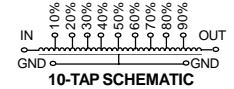
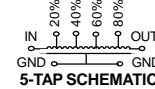
Type P0805, P0805A DIP



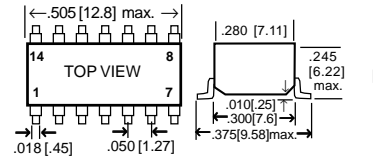
P0805G, P0805AG SM



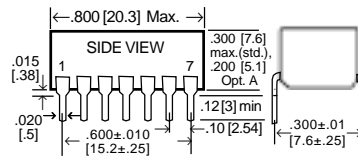
CIRCUIT	TAP No.					OUT	GND
	1	2	3	4	6		
A	1	2	3	4	6	7	4, 8
B	1	7	3	6	4	5	8
C	7	2	6	3	5	4	1, 8
D	2	3	4	5	6	7	1, 8
E	1	7	2	6	3	4	5, 8



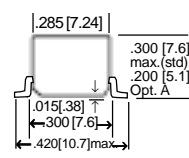
SMP1410 14-PIN SM 50-MIL



P1410, P1410A DIP

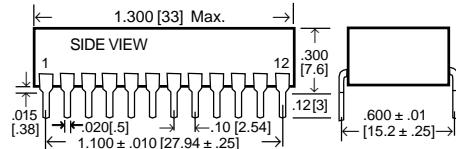


P1410G, P1410AG

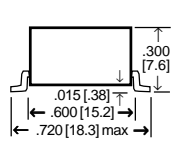


CIRCUIT	TAP NUMBER												OUT	GND
	IN	1	2	3	4	5	6	7	8	9	10	11		
A	2	3	4	5	6	7	8	9	10	11	12	13	1, 14	
B	2	3	4	5	6	8	9	10	11	12	13	1, 7		
C	14	2	12	3	11	4	5	10	6	9	7	1, 8		
D	1	13	2	12	3	11	5	10	6	9	7	8, 14		
E	1	13	3	12	4	11	5	10	6	9	7	8, 14		
F	2	3	4	5	6	7	9	10	11	12	13	1, 14		
G	1	13	2	12	3	11	4	10	5	9	6	7, 14		

Type P2420 24 PIN DIP



Type P2420G SM



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

RCD TYPES P0805, P0805A, P0805G, P0805AG				RCD TYPES P1410, P1410A, P1410G, P1410AG, SMP1410				RCD TYPES P2420, P2420G				
Total Delay (nS)	Tr: Max Rise Time (nS)	Td: Delay per Tap (nS)	Impedance Values (±10%)	Tr: Max Rise Time (nS)	Td: Delay per Tap (nS)	Impedance Values (±10%)	Tr: Max Rise Time (nS)	Td: Delay per Tap (nS)	Impedance Values (±10%)	Tr: Max Rise Time (nS)	Td: Delay per Tap (nS)	Impedance Values (±10%)
5	3	1	50Ω, 100Ω, 200Ω	-	1	100	-	0.5	50, 100	-	0.5	50, 100
10	4	2	50Ω, 100Ω, 200Ω	3	2	50, 100, 200	2	1	50, 100, 200	3	1.5	50, 100
20	6	4	50Ω, 100Ω, 200Ω	5.5	3	50, 100, 200	3.5	2	50, 100, 200, 300	4	2	50, 100, 150
30	8	6	50Ω, 100Ω, 200Ω	6.5	4	50, 100, 200, 300	4	2.5	50, 100, 200, 300, 500	5	2.5	50, 100, 150
40	12	8	50Ω, 100Ω, 200Ω	8	5	50, 100, 200, 300, 500	5	3	50, 100, 200, 300, 500	6	3	50, 100, 150, 200, 300
50	15	10	50Ω, 100Ω, 200Ω	10	6	50, 100, 200, 300, 500	6	3.75	50, 100, 200, 300, 500	7.5	3.75	50, 100, 150, 200, 300
60	18	12	50Ω, 100Ω, 200Ω	12	7	50, 100, 200, 300, 500	7	5	50, 100, 200, 300, 500	10	5	50, 100, 150, 200, 300
75	20	15	50Ω, 100Ω, 200Ω	15	10	50, 100, 200, 300, 500	10	6	50, 100, 200, 300, 500	12	6	50, 100, 150, 200, 300
100	28	20	50Ω, 100Ω, 200Ω	20	12	50, 100, 200, 300, 500	12	7.5	50, 100, 200, 300, 500	15	7.5	50, 100, 150, 200, 300
120	*	*		24	15	50, 100, 200, 300, 500	15	9	50, 100, 200, 300, 500	18	9	50, 100, 150, 200, 300
150	*	*		30	18	50, 100, 200, 300, 500	18	10	50, 100, 200, 300, 500	20	10	50, 100, 150, 200, 300
180	*	*		36	20	50, 100, 200, 300, 500	20	11	50, 100, 200, 300, 500	22	11	50, 100, 150, 200, 300
200	*	*		40	22	50, 100, 200, 300, 500	22	12.5	50, 100, 200, 300, 500	25	12.5	50, 100, 150, 200, 300
220	*	*		44	25	50, 100, 200, 300, 500	25	15	50, 100, 200, 300, 500	30	15	50, 100, 150, 200, 300
250	*	*		50	30	50, 100, 200, 300, 500	30	18.75	50, 100, 200, 300, 500	40	18.75	50, 100, 150, 200, 300
300	*	*		60	40	50, 100, 200, 300, 500	40	25	50, 100, 200, 300, 500	50	25	100, 150, 200, 300, 500
400				80	50	100, 200, 300, 500	50	30	100, 200, 300, 500	60	30	100, 150, 200, 300, 500
500				100	60	100, 200, 300, 500	60	37.5	100, 200, 300, 500	75	37.5	100, 150, 200, 300, 500
600				120	75	100, 200, 300, 500	75	50	100, 200, 300, 500	100	50	100, 150, 200, 300, 500
750				150	100	100, 200, 300, 500	100	75	100, 200, 300, 500	150	75	150, 200, 300, 500
1000				200	150	150, 200, 300, 500	150	100	150, 200, 300, 500	200	100	150, 200, 300, 500
1500				*	*		*	150	150, 200, 300, 500	300	150	200, 300, 500
2000				*	*		*	200	150, 200, 300, 500	400	200	200, 300, 500
3000				*	*		*	300	200, 300, 500	500	250	200, 300, 500
4000				*	*		*	400	200, 300, 500			
5000				*	*		*	500	200, 300, 500			

* Consult factory for extended range

Total Delay Tolerance	±5% or ±2nS (whichever is greater)
Tap Delay Tolerance	±5% or ±0.5nS (whichever is greater)
Temperature Coefficient	100ppm/°C Max.
Insulation Resistance	1000MΩ min.
Dielectric Strength	100VDC
Distortion	±10% Max.
Operating Temp. Range	0 to 70°C (Opt.39= -40 to 85°C, ER= -55 to 125°C)
Operating Freq. (BW)	BW (MHz)=.35/(TR nS x 1000)
Attenuation	5%-10% typ <500nS, 10-20% ≥500nS

P/N DESIGNATION:

P1410 - 10NS - 101 C B W

Type (SMP1410, P0805, P1410, P2420)

Options: A= low profile, G=gullwing, AG= low profile & gullwing, 39= -40 to 85°C, ER= -55 to +125°C (leave blank if std.)

Total Delay: 10NS, 100NS, 1000NS, etc.

Impedance in 3-digit code: 50R=50Ω, 101=100Ω, 201=100Ω, etc.

Circuit (A, B, C, D, E, F, G)

Packaging: B=Bulk, T=Tape & Reel (SMP1410 only)

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable)