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

RoHS Term.W is RoHS compliant

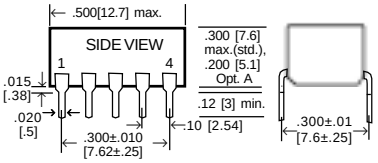
RESISTORS•CAPACITORS•COILS•DELAY LINES

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.).

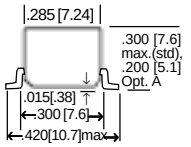
- ❒ Low cost and the industry's widest range, 5-5000nS
- ❒ Custom circuits, delay/rise times, impedance available
- ❒ Military screening per MIL-PRF-83531avail
- ❒ Option A: low profile package height
- ❒ Option G: gull wing lead wires for SM applications

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.

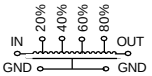
Type P0805, P0805A DIP



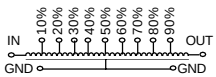
P0805G, P0805AG SM



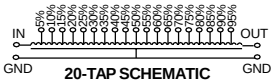
P0805	TAP No.						
CIRCUIT	IN	1	2	3	4	OUT	GND
A	1	2	3	4	6	7	4, 8
B	1	7	3	6	4	5	8
C	7	2	6	3	5	4	1, 8
D	2	3	4	5	6	7	1, 8
E	1	7	2	6	3	4	5, 8



5-TAP SCHEMATIC

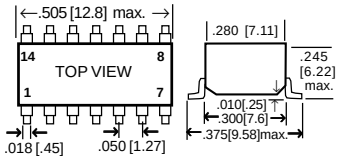


10-TAP SCHEMATIC

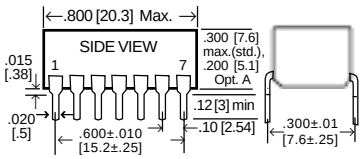


20-TAP SCHEMATIC

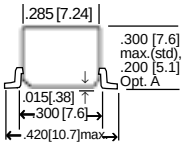
SMP1410 14-PIN SM 50-MIL



P1410, P1410A DIP

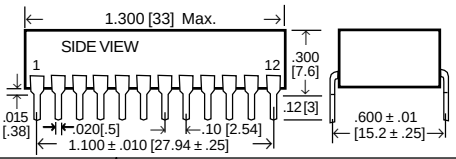


P1410G, P1410AG

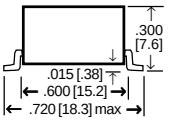


1410	TAP NUMBER											
CIRCUIT	IN	1	2	3	4	5	6	7	8	9	OUT	GND
A	2	3	4	5	6	7-8	9	10	11	12	13	1, 14
B	2	3	4	5	6	8	9	10	11	12	13	1, 7
C	14	2	12	3	11	4	5	10	6	9	7	1, 8
D	1	13	2	12	3	11	5	10	6	9	7	8, 14
E	1	13	3	12	4	11	5	10	6	9	7	8, 14
F	2	3	4	5	6	7	9	10	11	12	13	1, 14
G	1	13	2	12	3	11	4	10	5	9	6	7, 14

Type P2420 24 PIN DIP



Type P2420G SM



P2420	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
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%)
5	3	1	50Ω, 100Ω, 200Ω	-	-	-	-	-	-
10	4	2	50Ω, 100Ω, 200Ω	3	1	100	2	0.5	50, 100
20	6	4	50Ω, 100Ω, 200Ω	5.5	2	50, 100, 200	3	1	50, 100
30	9	6	50Ω, 100Ω, 200Ω	6.5	3	50, 100, 200	3.5	1.5	50, 100
40	12	8	50Ω, 100Ω, 200Ω	8	4	50, 100, 200, 300	4	2	50, 100, 150
50	15	10	50Ω, 100Ω, 200Ω	10	5	50, 100, 200, 300, 500	5	2.5	50, 100, 150
60	18	12	50Ω, 100Ω, 200Ω	12	6	50, 100, 200, 300, 500	6	3	50, 100, 150, 200, 300
75	20	15	50Ω, 100Ω, 200Ω	15	7.5	50, 100, 200, 300, 500	7.5	3.75	50, 100, 150, 200, 300
100	28	20	50Ω, 100Ω, 200Ω	20	10	50, 100, 200, 300, 500	10	5	50, 100, 150, 200, 300
120	*			24	12	50, 100, 200, 300, 500	12	6	50, 100, 150, 200, 300
150	*			30	15	50, 100, 200, 300, 500	15	7.5	50, 100, 150, 200, 300
180	*			36	18	50, 100, 200, 300, 500	18	9	50, 100, 150, 200, 300
200	*			40	20	50, 100, 200, 300, 500	20	10	50, 100, 150, 200, 300
220	*			44	22	50, 100, 200, 300, 500	22	11	50, 100, 150, 200, 300
250	*			50	25	50, 100, 200, 300, 500	25	12.5	50, 100, 150, 200, 300
300				60	30	50, 100, 200, 300, 500	30	15	50, 100, 150, 200, 300
400				80	40	50, 100, 200, 300, 500	40	18.75	50, 100, 150, 200, 300
500				100	50	50, 100, 200, 300, 500	50	25	100, 150, 200, 300, 500
600				120	60	100, 200, 300, 500	60	30	100, 150, 200, 300, 500
750				150	75	100, 200, 300, 500	75	37.5	100, 150, 200, 300, 500
1000				200	100	100, 200, 300, 500	100	50	100, 150, 200, 300, 500
1500				*			150	75	150, 200, 300, 500
2000				*			200	100	150, 200, 300, 500
3000							300	150	200, 300, 500
4000							400	200	200, 300, 500
5000							500	250	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 to70°C (Opt.39= -40 to 85°C, ER= -55 to125°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)

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