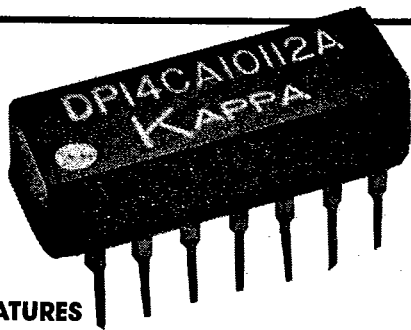


SERIES DP14C/DP16C ANALOG 10-TAP

T-47-21

14-PIN & 16-PIN DIP DELAY LINES

(available in full-MIL conformance as Series DP14M/DP16M)



FEATURES

- TTL and DTL compatible
- Meets applicable requirements of MIL-D-23859
- 5/1 Delay-to-Risetime Ratio
- 10 Equally-Spaced Taps
- Wide Operating Temperature Range
- Low cost

ELECTRICAL SPECIFICATIONS

Total Delay: 10 to 1000 ns
 Tap Delays: 10% increments standard (other increments available upon request)
 Risetime: 20% maximum of total delay (see Table 1)
 Characteristic Impedance: 50 to 500 ohms (±10%)
 Attenuation: 2dB max (see Table 1)
 Distortion: ±10% max

Temperature Coefficient of Delay: 100ppm/°C max
 Operating Temperature Range: -55°C to +125°C
 Storage Temperature Range: -65°C to +130°C
 Insulation Resistance: 1000 megohms min @ 50VDC @ 25°C
 Dielectric Strength: 50VDC

MECHANICAL SPECIFICATIONS

Case Configuration: See FIGURE 2
 Case Material: Molded Epoxy
 Terminals: Flat, DIP-type (See FIGURE 2)
 Terminal Material: Kovar or equivalent, tin-plated
 Pin Connections: See TABLE II and III
 Potting: 100% filled with a two-component epoxy
 Marking: Includes manufacturer's name, part number and date code (See FIGURE 2)

PART NUMBER EXAMPLE

Typical part number is a combination of the Basic Series Number, Mounting Height Code, Delay Time, Impedance, and Pin Sequence Code.

EXAMPLE: DP14CA10112A

(100 ns, 100 ohm, 0.200" (5.08 mm) Max. Height, using the code "A" Pin Sequence)

DP14(16)C A 101 12 A

DP14C is 14-Pin DIP
 DP16C is 16-Pin DIP

MOUNTING HEIGHT CODE (See Table IV)

DELAY TIME: Expressed in nanoseconds (ns).
 First two digits are significant figures.
 Last digit specifies number of zeros to follow.

IMPEDANCE: Expressed in ohms (Ω).
 First digit is significant.
 Last digit specifies number of zeros to follow.

PIN SEQUENCE CODE (See Table II and III).
 "STANDARD" Pin Sequence if omitted.

TABLE I

Td (ns) ⁽¹⁾ (±5%)	Td/tap (ns) ⁽²⁾⁽³⁾ (±5%)	Tr (ns) MAX	ATTENUATION (%) TYPICAL PER IMPEDANCE (Ω)				
			50	100	200	300	500
10	1	3					
20	2	5.5	3	5	5		
30	3	6.5	3	5	5		
40	4	8	3	5	5	5	
50	5	10	3	5	5	5	7
60	6	12	3	5	5	5	7
75	7½	15	3	5	5	5	7
100	10	20	3	5	5	7	7
120	12	24	3	5	6	7	8
150	15	30	3	5	6	7	8
180	18	36	4	5	6	7	8
200	20	40	4	5	6	7	8
220	22	44	4	5	6	7	8
250	25	50	4	5	6	7	8
300	30	60		5	8	10	10
375	37½	75		7	8	10	10
500	50	100		8	10	12	12
600	60	120				15	15
750	75	150				15	20
1000	100	200					20

⁽¹⁾ Or ±2 ns, whichever is greater. ⁽²⁾ Or ±1 ns, whichever is greater, referenced from input. ⁽³⁾ For 10-tap lines only.

TABLE II. PIN-NUMBER SEQUENCE (FOR DP14C ONLY)*

CODE	IN	10%	20%	30%	40%	50%	60%	70%	80%	90%	OUT	GND
Standard	14	2	12	3	11	4	5	10	6	9	7	1, 8
A	1	2	13	3	12	4	10	5	9	6	7	14
B	2	3	4	5	6	7	9	10	11	12	13	1, 14
C	7	9	6	10	5	11	12	3	13	2	14	1, 8
D	1	13	2	12	3	11	4	10	5	9	6	7, 8, 14
E	2	3	4	5	6	7, 8	9	10	11	12	13	1, 14
F	1	13	2	12	3	11	4	10	5	9	6	7
G	2	13	3	12	4	11	5	10	6	9	7	8, 14
H	2	3	4	5	6	7	9	10	11	12	13	1
I	1	13	2	12	3	11	5	10	6	9	7	8, 14
J	1	2	13	3	12	4	10	5	9	6	7	8, 14
U	2	3	4	5	6	8	9	10	11	12	13	1, 7
V	2	3	4	5	6	8	9	10	11	12	13	1
W	1	13	2	12	3	11	4	10	5	9	6	7, 14

*Other pin sequences available upon request.

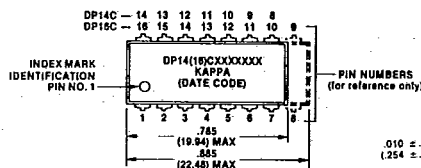
TABLE III. PIN-NUMBER SEQUENCE (FOR DP16C ONLY)*

CODE	IN	10%	20%	30%	40%	50%	60%	70%	80%	90%	OUT	GND
A	15	2	14	3	13	4	5	11	6	10	7	1, 9
B	1	15	2	14	3	13	4	12	5	11	6	8
C	1	15	3	14	4	13	5	12	6	11	8	9, 16

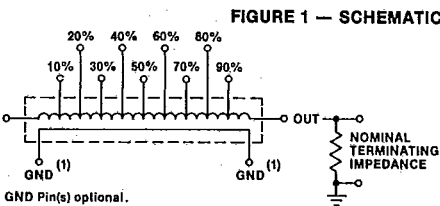
*Other pin sequences available upon request.

TABLE IV MOUNTING HEIGHT

CODE	DIMENSION (MAX)
A	.200 (5.08)
B	.250 (6.35)
C	.300 (7.62)

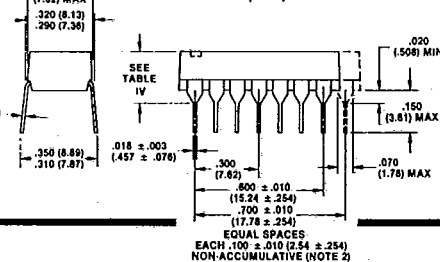


Notes:
 (1) A notch may be substituted for PIN #1 Dot Index.
 (2) Each terminal is located with ±.010 of its nominal multiple of .100 along this longitudinal dimension relative to terminals 7 and 8.



Note:
 (1) Extra GND Pin(s) optional.

FIGURE 2 — MARKING & DIMENSIONS In (mm)



EQUAL SPACES
 EACH .100 ±.010 (2.54 ±.254)
 NON-ACCUMULATIVE (NOTE 2)



U.S.A. Factory Direct: 1443 Pinewood Street, Rahway, NJ 07065, Phone (201) 396-9400, Toll Free 800-223-0603, Telex: 130081, KAPPA RHWY
 West Coast Office: 13455 Ventura Blvd. #220, Sherman Oaks, CA 91423, (818) 995-2401. West Coast Distributor: Phone (213) 283-2058.