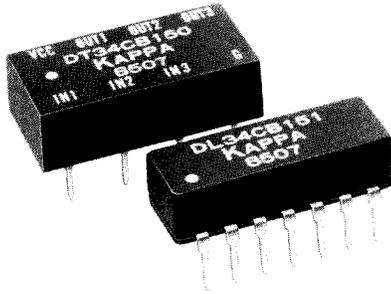


# SERIES DL34/DT34 TTL SCHOTTKY • 3 INDEPENDENT DELAYS

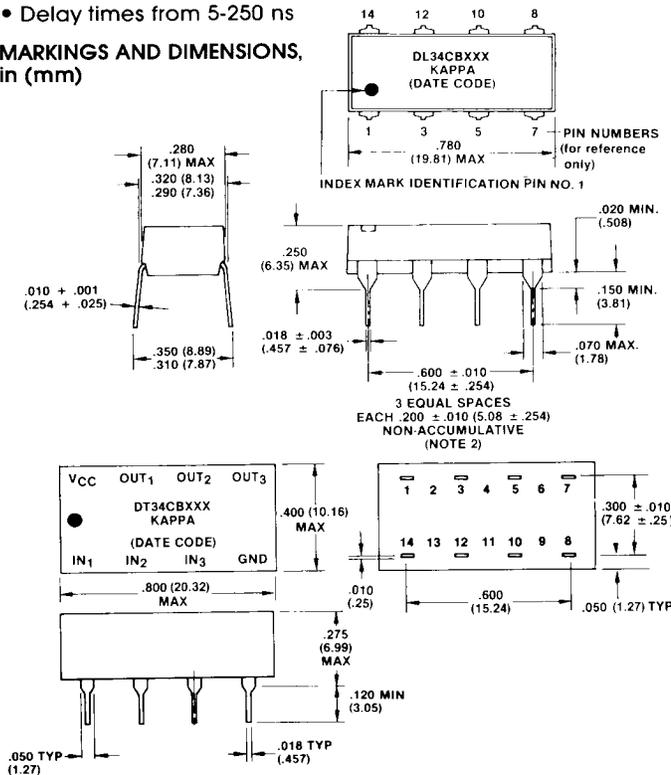
## TRIPLE DELAY LINES (14-PIN)



### FEATURES

- Available in auto-insertable (DL34) and standard (DT34) 14-Pin package
- Risetime: 4 ns max<sup>(5)(6)</sup>
- 3 independent equal delays
- TTL Schottky interfaced
- Delay times from 5-250 ns

### MARKINGS AND DIMENSIONS, in (mm)



### Marking and dimensions notes:

- A notch may be substituted for PIN #1 Dot Index.
- Each terminal is located within  $\pm .010$  of its nominal multiple of .100 along this longitudinal dimension relative to terminals 7 and 8.

### RECOMMENDED OPERATING CONDITIONS

	MIN	TYP	MAX	UNIT
V <sub>CC</sub> Supply Voltage	4.75	5.00	5.25	V
V <sub>IH</sub> High-Level Input Voltage	2.0			V
V <sub>IL</sub> Low-Level Input Voltage			0.8	V
I <sub>IK</sub> Input Clamp Current			-18	mA
I <sub>OH</sub> High-Level Output Current			-1.0	mA
I <sub>OL</sub> Low-Level Output Current			20	mA
T <sub>A</sub> Operating Free-Air Temperature	0	+25	+70	°C

### DC ELECTRICAL CHARACTERISTICS

### TEST CONDITIONS

	V <sub>CC</sub> = min, V <sub>IH</sub> = min, I <sub>OH</sub> = max	2.7	3.4		UNIT
V <sub>OH</sub> High-Level Output Voltage	V <sub>CC</sub> = min, V <sub>IL</sub> = max, I <sub>OL</sub> = max			0.5	V
V <sub>OL</sub> Low-Level Output Voltage	V <sub>CC</sub> = min, I <sub>I</sub> = I <sub>IK</sub>			-1.2	V
V <sub>IK</sub> Input Clamp Voltage	V <sub>CC</sub> = max, V <sub>IN</sub> = 2.7V			50	μA
I <sub>IH</sub> High-Level Input Current	V <sub>CC</sub> = max, V <sub>IN</sub> = 5.25V			1.0	mA
I <sub>IL</sub> Low-Level Input Current	V <sub>CC</sub> = max, V <sub>IN</sub> = 0.5V			-2	mA
I <sub>OS</sub> Short Circuit Output Current	V <sub>CC</sub> = max, V <sub>OUT</sub> = 0, one output at a time	-40		-100	mA
I <sub>CC</sub> High-Level Supply Current	V <sub>CC</sub> = max, V <sub>IN</sub> = OPEN			90	mA
I <sub>CC</sub> Low-Level Supply Current	V <sub>CC</sub> = max, V <sub>IN</sub> = 0			115	mA
N <sub>H</sub> Fanout High-Level Output	V <sub>CC</sub> = max, V <sub>OH</sub> = 2.7V			10	TTL load
N <sub>L</sub> Fanout Low-Level Output	V <sub>CC</sub> = max, V <sub>OL</sub> = 0.5V			10	TTL load

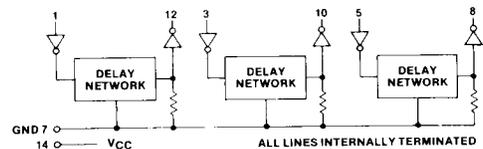
### INPUT PULSE TEST CONDITIONS

	3.1	3.2	3.3	UNIT
E <sub>IN</sub> Pulse Voltage				V
T <sub>RI</sub> Pulse Rise-Time			2.0	ns
T <sub>W</sub> Pulse Width, of Total Delay	100		50	%
d Duty Cycle		33.3		%

PART NUMBER <sup>(7)</sup>	Total Delay (ns) <sup>(1) (2)</sup>
DL34/DT34CB250	25
DL34/DT34CB500	50
DL34/DT34CB750	75
DL34/DT34CB101	100
DL34/DT34CB251	250

### Notes:

- Delays measured at 1.5V level on leading edge only.
- Delay tolerances:  $\pm 5\%$  or  $\pm 2$  ns, whichever is greater, referenced from input and guaranteed only under the following test conditions: V<sub>CC</sub> = Typ, T<sub>A</sub> = Typ, E<sub>IN</sub> = Typ, T<sub>RI</sub> = max, T<sub>W</sub> = min, P<sub>RR</sub> = 1MHz (or d/tw, whichever is less), R<sub>L</sub> 1 megohm and C<sub>L</sub> 2pf.
- Temperature coefficient of delay will vary, depending upon total delay, according to the formula:  $\tau_{TA} = (100 + (25,000/\tau_{PLH}))$ .
- Delay will inversely vary about 4% for every 5% change in supply voltage.
- Risetime measured from 0.75V to 2.4V level.
- Measured with no loads.
- Other delays also available upon request.



U.S.A. Factory Direct: 1443 Pinewood Street, Rahway, NJ 07065, Phone (908) 396-9400, Toll Free 800-223-0603