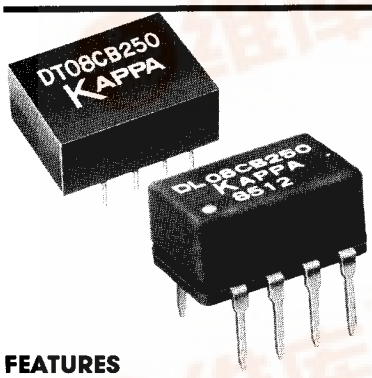
SERIES DL08CB/DT08CB TTL SCHOTTKY

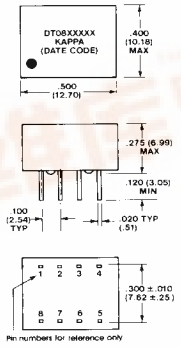
5-TAP TTL DELAY LINE (8-PIN)



FEATURES

- TTL Schottky Interfaced
- 8-pin package
- 5 equally-spaced taps
- Total delays from 25-1000 ns

MARKINGS AND DIMENSIONS, in (mm)



RECOMMENDED OPERATING CONDITIONS

		MIN	TYP	MAX	UNIT
V_{CC}	Supply Voltage	4.75	5.00	5.25	V
V_{IH}	High-Level Input Voltage	2.0			V
V_{IL}	Low-Level Input Voltage			0.8	V
I_{IK}	Input Clamp Current			−18	mA
I_{OH}	High-Level Output Current			−1.0	mA
I_{OL}	Low-Level Output Current			20	mA
T_A	Operating Free-Air Temperature	0	+25	+70	°C

DC ELECTRICAL CHARACTERISTICS

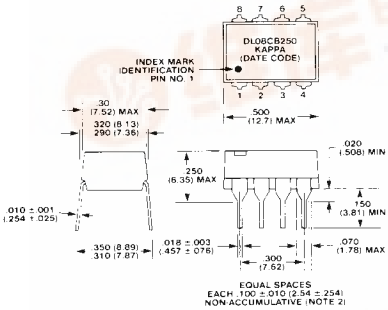
		TEST CONDITIONS				
V_{OH}	High-Level Output Voltage	V_{CC} = min, V_{IH} = min, I_{OH} = max	2.7	3.4		V
V_{OL}	Low-Level Output Voltage	V_{CC} = min, V_{IL} = max, I_{OL} = max			0.5	V
V_{IK}	Input Clamp Voltage	V_{CC} = min, I_I = I_{IK}			−1.2	V
I_{IH}	High-Level Input Current	V_{CC} = max, V_{IN} = 2.7V			50	μA
		V_{CC} = max, V_{IN} = 5.25V			1.0	mA
I_{IL}	Low-Level Input Current	V_{CC} = max, V_{IN} = 0.5V			−2	mA
I_{OS}	Short Circuit Output Current	V_{CC} = max, V_{OUT} = 0, one output at a time	−40		−100	mA
I_{CCH}	High-Level Supply Current	V_{CC} = max, V_{IN} = OPEN		30	45	mA
I_{CCL}	Low-Level Supply Current	V_{CC} = max, V_{IN} = 0		65	75	mA
N_H	Fanout High-Level Output	V_{CC} = max, V_{OH} = 2.7V			20	TTL load
N_L	Fanout Low-Level Output	V_{CC} = max, V_{OL} = 0.5V			10	TTL load

AC ELECTRICAL CHARACTERISTICS

T_{PLH}	Low-to-High Level Delay Time	V_{CC} = typ, T_A = typ, E_{IN} = typ T_W = typ, d = typ(1)(2)(6)	−5		+5	%
T_{PCC}	V_{CC} Coefficient of Delay	V_{CC} = min-to-max, T_A = typ E_{IN} = typ, T_W = typ, d = typ(1)(2)(4)(6)		−.016		%/mV
T_{RO}	Output Risetime	V_{CC} = typ, T_A = typ, E_{IN} = typ T_W = typ, d = typ(5)(6)		3	4	ns

INPUT PULSE TEST CONDITIONS

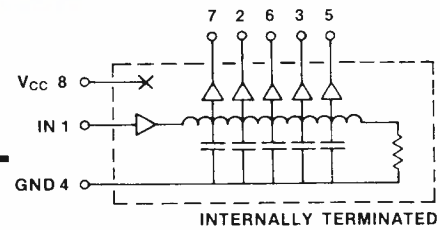
E_{IN}	Pulse Voltage	3.1	3.2	3.3	V
T_{RI}	Pulse Rise-Time			2.0	ns
T_W	Pulse Width, of Total Delay	40	100		%
d	Duty Cycle		33.3	50	%



PART NUMBER(7)	Total Delay (ns)(1) (2)	Tap Delay (ns)(1) (2)
DL08/DT08CB250	25	5
DL08/DT08CB500	50	10
DL08/DT08CB750	75	15
DL08/DT08CB101	100	20
DL08/DT08CB251	250	50
DL08/DT08CB501	500	100

Notes:

1. Delays measured at 1.5V level on leading edge only.
2. Delay tolerances: ± 5% or ± 2 ns, whichever is greater, referenced from input and guaranteed only under the following test conditions: V_{CC} = Typ, T_A = Typ, E_{IN} = Typ, T_{RI} = max, T_W = Typ, P_{RR} = 1MHz (or d/tw, whichever is less), RL = 1 megohm and CL = 2pf.
3. Temperature coefficient of delay will vary, depending upon total delay, according to the formula: T_{PTA} = (100 + (25,000/T_{PLH})).
4. Delay will vary about 4% for every 5% change in supply voltage.
5. Risetime measured from 0.75V to 2.4V level.
6. Measured with no loads on taps.
7. **Other delays also available upon request.**



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