

Available in these logics:

# Oscillators

TTL

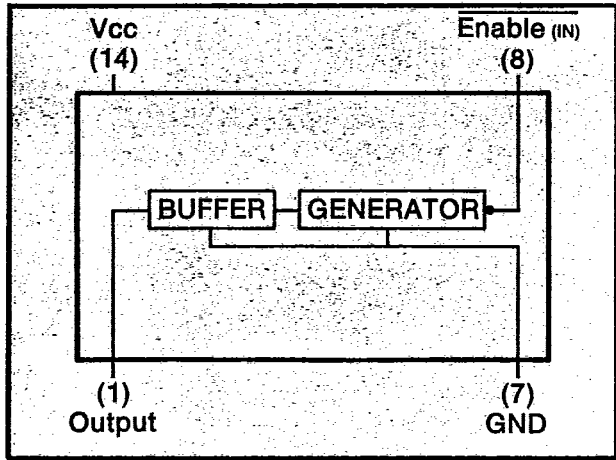
Schottky  
TTL

ECL

T-50-23

## TTL SQUARE WAVE OSCILLATOR

- Available in frequencies from 1 to 50 MHz (other frequencies available).
- Temperature coefficient 250 ppm/°C.
- Temperature range 0 to 70°C. -55 to 125°C available.
- 5V rated input with 10% operable supply-voltage variance.
- Transfer molded—reliable.



Part Number	Output Frequency ±2%* (MHz)
TTLOS001	1
TTLOS005	5
TTLOS010	10
TTLOS020	20
TTLOS030	30
TTLOS040	40
TTLOS050	50

\*Measured at  $V_{cc} = 5.0V \pm 1V$  and  $T_a @ 25^\circ C$ .

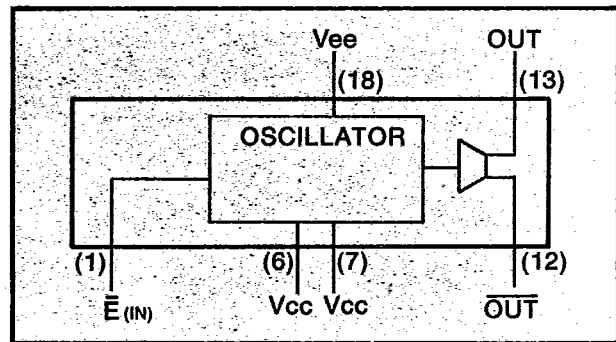
Available in these packages:



For dimensions, see drawing 1, on page 22.

## 100k ECL OSCILLATOR

- Available in frequencies from 10 to 100 MHz.
- Temperature coefficient 200 ppm/°C.
- Temperature range 0 to +85°C.
- $V_{ee} = -4.5 \pm 10\% V_{dc}$ .
- Transfer molded—reliable.
- Also available in 10k ECL logic.



Part Number	Output Frequency ±2%* (MHz)
EKLOS010	10
EKLOS020	20
EKLOS030	30
EKLOS040	40
EKLOS050	50
EKLOS060	60
EKLOS070	70
EKLOS080	80
EKLOS090	90
EKLOS100	100

\*Measured at  $V_{ee} = -4.5V \pm 0.1V$  and  $T_a @ 25^\circ C$ .

Available in these packages:



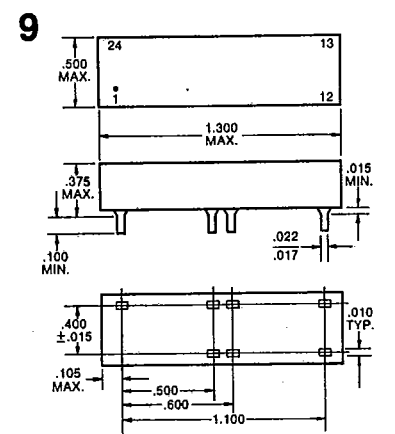
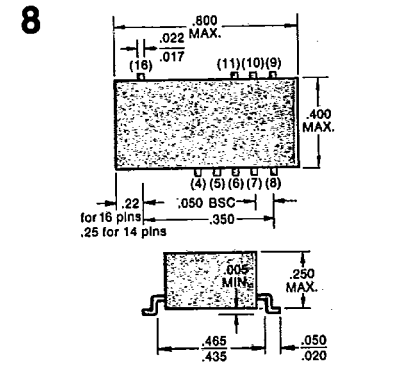
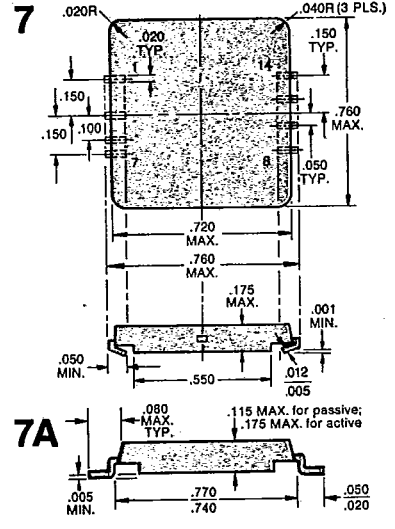
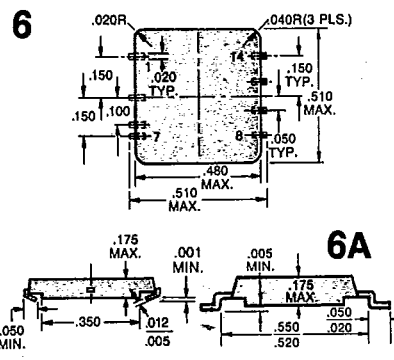
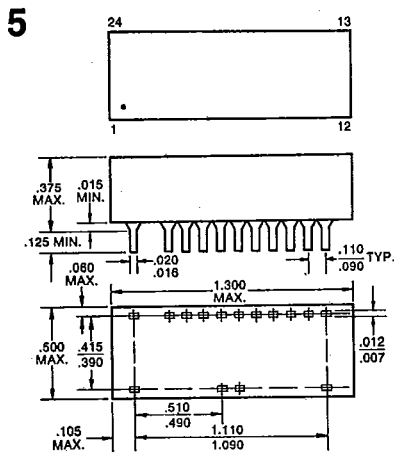
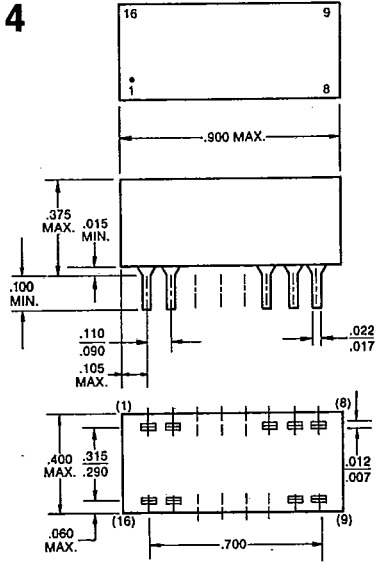
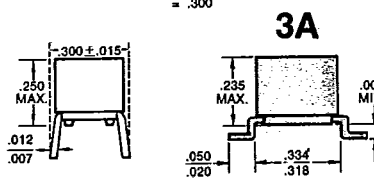
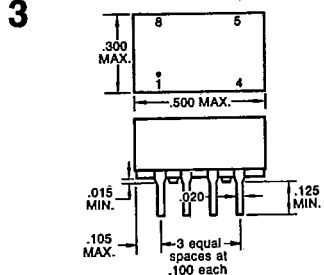
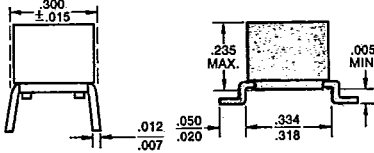
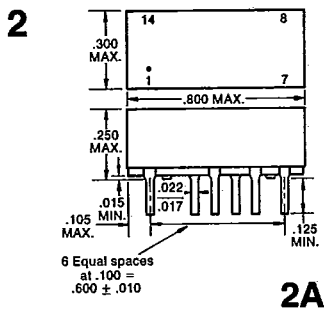
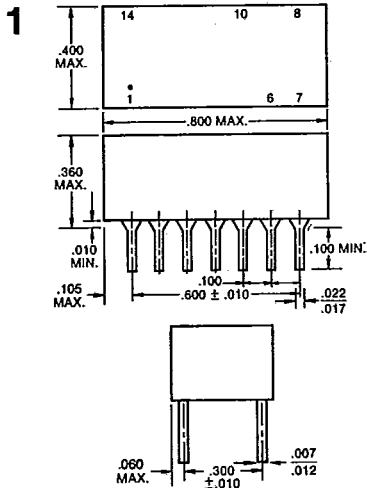
For dimensions, see drawing 9, on page 22.

Numbers of the drawings below are referenced in the catalog at the locations describing specific modules. One drawing may be referenced by two, three, or more modules. Only the pins specified in the applicable schematic are provided with each package.

Pin numbers shown are for identification only, and are not necessarily marked on unit.

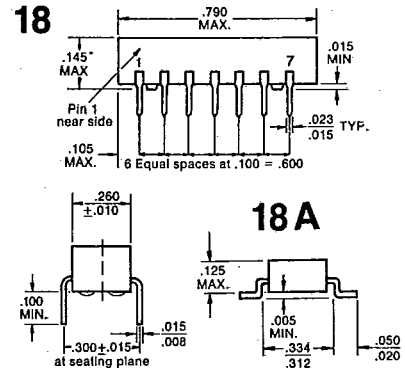
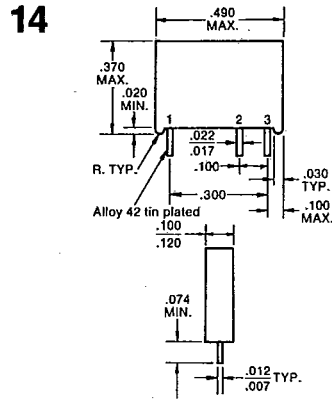
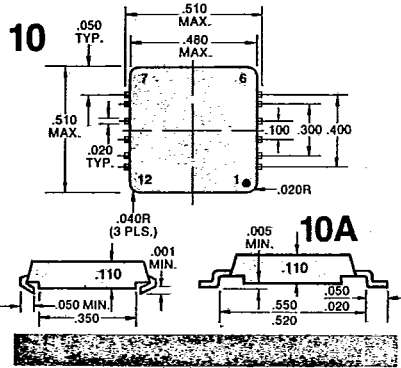
# Dimensions

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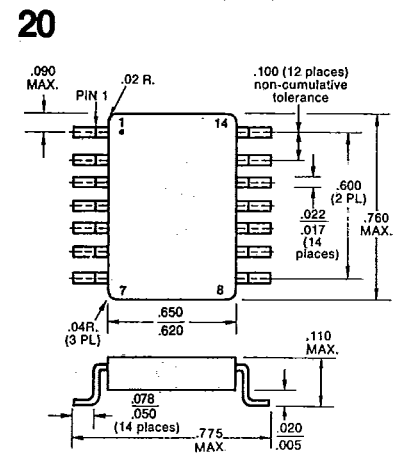
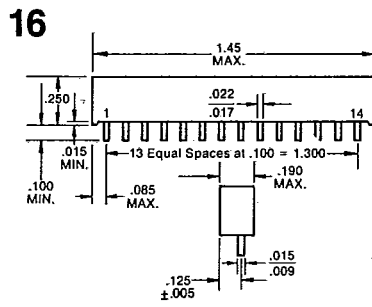
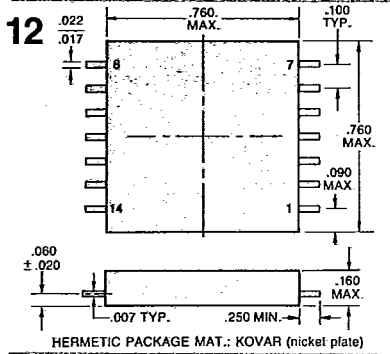
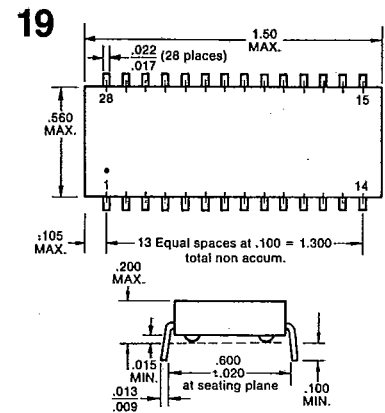
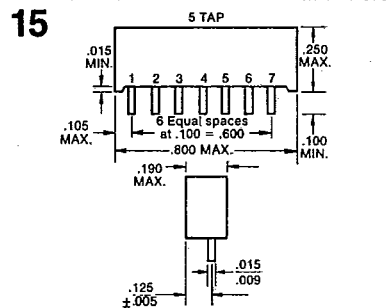
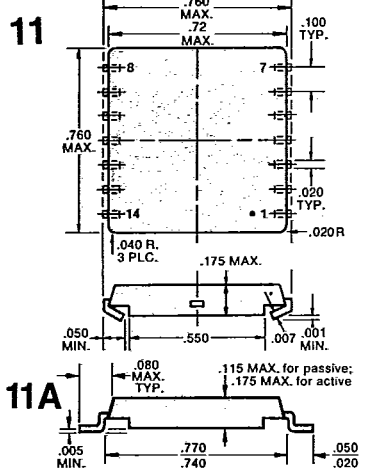


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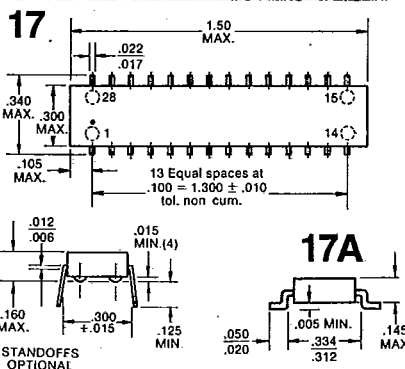
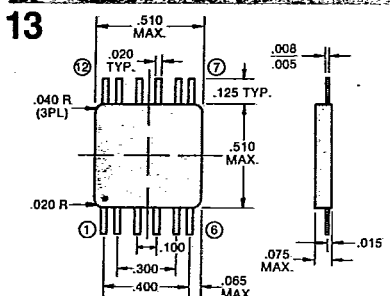
Surface-mount models are shown in shaded color.



\*For delays above 200 ns, height is .200 MAX.



Can be used for ceramic-substrate applications.



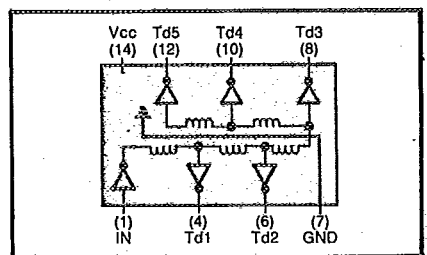
**High-Performance 5-Tap TTL Delay Modules— $\frac{3}{4}$ " Sq.**

**High-Performance Surface-Mount TTL Delay Modules**

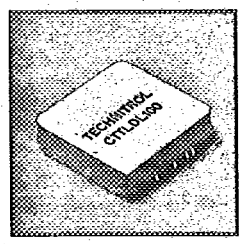
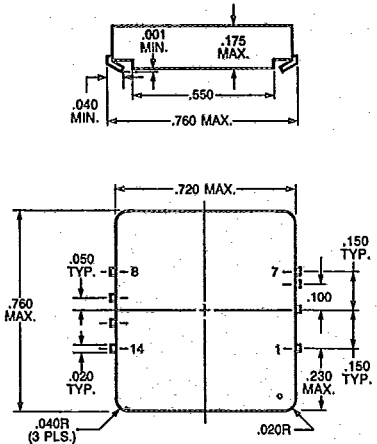
Part No.	NANOSECONDS					All Taps (Max.)	
	T <sub>D1</sub>	T <sub>D2</sub>	T <sub>D3</sub>	T <sub>D4</sub>	T <sub>D5</sub>	T <sub>R+</sub>	T <sub>R-</sub>
CTTLDL025	5.0	10.0	15.0	20.0	25.0	2.0	2.0
CTTLDL050	10.0	20.0	30.0	40.0	50.0	2.0	2.0
CTTLDL075	15.0	30.0	45.0	60.0	75.0	2.0	2.0
CTTLDL100	20.0	40.0	60.0	80.0	100.0	2.0	5.0
CTTLDL125	25.0	50.0	75.0	100.0	125.0	2.0	5.0
CTTLDL150	30.0	60.0	90.0	120.0	150.0	2.0	6.0
CTTLDL200	40.0	80.0	120.0	160.0	200.0	2.0	7.0

Delay Characteristics measured @ V<sub>CC</sub> = 5.0V, 25°C no load.  
 Delay Tolerance ±2 ns or 5% (whichever is greater).  
 Minimum input-pulse width 20% of total delay.

**Schematic and Pin-Out for CTTLDL**



**C-Lead CTTLDL**



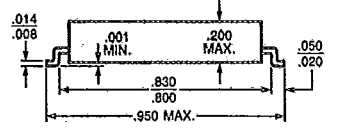
Actual Size

**High-Performance Hermetic 5-Tap TTL Delay Modules— $\frac{3}{4}$ " Sq.**

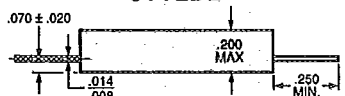
Part No.	Part No.	NANOSECONDS					All Taps (Max.)	
		T <sub>D1</sub>	T <sub>D2</sub>	T <sub>D3</sub>	T <sub>D4</sub>	T <sub>D5</sub>	T <sub>R+</sub>	T <sub>R-</sub>
GJTTLDL025	JTTLDL025	5.0	10.0	15.0	20.0	25.0	2.0	2.0
GJTTLDL050	JTTLDL050	10.0	20.0	30.0	40.0	50.0	2.0	2.0
GJTTLDL075	JTTLDL075	15.0	30.0	45.0	60.0	75.0	2.0	2.0
GJTTLDL100	JTTLDL100	20.0	40.0	60.0	80.0	100.0	2.0	5.0
GJTTLDL125	JTTLDL125	25.0	50.0	75.0	100.0	125.0	2.0	6.0
GJTTLDL150	JTTLDL150	30.0	60.0	90.0	120.0	150.0	2.0	7.0
GJTTLDL200	JTTLDL200	40.0	80.0	120.0	160.0	200.0	2.0	8.0

Delay Characteristics measured @ V<sub>CC</sub> = 5.0V, 25°C no load.  
 Delay Tolerance ±2 ns or 5% (whichever is greater).  
 Minimum input-pulse width 40% of total delay.

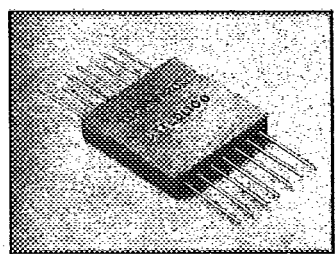
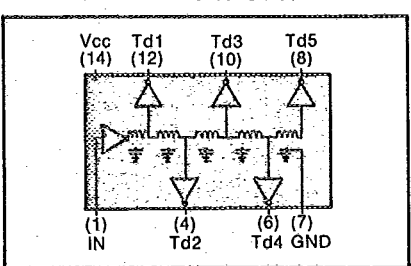
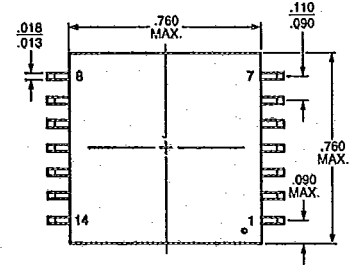
**Hermetic Gull Wing GJTTLDL**



**Hermetic Flat-Pack JTTLDL**



**Schematic and Pin-Out for GJTTLDL and JTTLDL**



Actual Size

Lead material: electro tin plated (alloy 42)  
 Note: Pin numbers shown are for reference only and not necessarily marked on unit.

**Technitrol**

1952 East Allegheny Avenue  
 Philadelphia, PA 19134 USA  
 Phone: 215-426-9105  
 Fax: 215-426-2836