

# bel/ defining a degree of excellence

## DIGITAL DELAY LINE SERIES 0447 SINGLE-IN-LINE 10 TAP

### TECHNICAL INFORMATION

#### TEST CONDITIONS

Pulse Voltage 3.2 Volts  
 Rise Time 3.0 Nsec (10%-90%)  
 Pulse Width  $1.2 \times$  Total Delay  
 Pulse Period  $4 \times$  Pulse Width  
 Supply Current,  $I_{CC1}$  120.0 Milliamps max.  
 Supply Voltage,  $V_{CC}$  5.0 Volts  
 Ambient Temperature 25°C

#### PERFORMANCE CHARACTERISTICS

Logic 1 Input Current  
 50 Microamp max.  
 Logic 0 Input Current  
 - 2 Milliamp max.  
 Logic 1 Output Voltage  
 2.7 Volts min.  
 Logic 0 Output Voltage  
 0.5 Volts max.  
 Delay Tolerance From Input To Tap  
 $\pm 2$  Nsec or 5% whichever  
 is greater  
 Delay Tolerance From Tap To Tap  
 $\pm 2$  Nsec or 7% whichever  
 is greater

All specified Performance Characteristics apply at above listed Test Conditions.

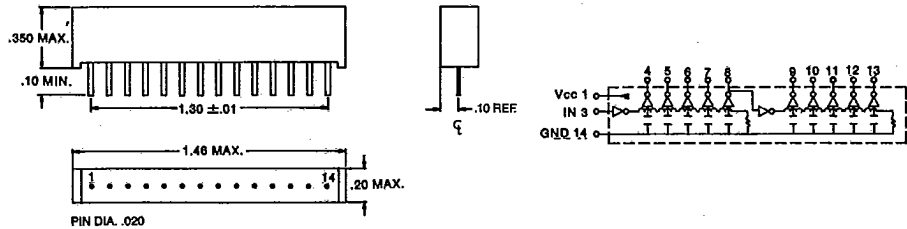
#### ELECTRICAL CHARACTERISTICS

Supply Voltage,  $V_{CC}$   
 4.75 to 5.25 Volts  
 Operating Temperature Range  
 0°C To 70°C  
 Temperature Coefficient Of Total Delay  
 500PPM/°C Typical  
 Minimum Input Pulse Width  
 40% Of Total Delay  
 Maximum Duty Cycle  
 50%

#### DRIVE CAPABILITIES

10 TTL Loads/Tap max.  
 20 TTL Loads/Unit max.

- Compatible with TTL and DTL circuits.
- Other delays and tolerances upon request



Part Number	Total Delay 1, 3	Delay / Tap 1, 3	Rise, Time 2, 3
0447-0050-07	50NS	5NS	4NS
0447-0100-07	100NS	10NS	4NS
0447-0150-07	150NS	15NS	4NS
0447-0200-07	200NS	20NS	4NS
0447-0250-07	250NS	25NS	4NS

1 Delays measured at 1.5 Volts level on Leading Edge only.  
 2 Rise Times measured from .75 Volts to 2.4 Volts.  
 3 Measured with no loads on taps.

Specifications Subject To Change Without Notice