

## DIGITAL DELAY LINE SERIES A447 LOW POWER MODULE 20 MA TYP 5 TAP/FIXED DELAY

### TECHNICAL INFORMATION

#### TEST CONDITIONS

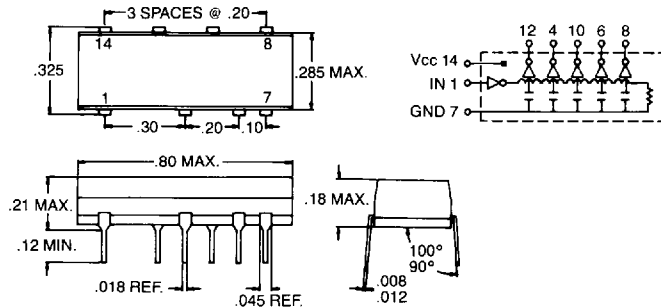
Pulse Voltage	3.2 Volts
Rise Time	3.0 Nsec (10%-90%)
Pulse Width	1.2 x Total Delay
Pulse Period	4 x Pulse Width
Supply Current, I <sub>ccL</sub>	20.0 Milliamps typical
Supply Voltage, V <sub>cc</sub>	5.0 Volts
Ambient Temperature	25°C

#### PERFORMANCE CHARACTERISTICS

Delay Tolerance From Input To Tap  
± 2 Nsec or 5% whichever is greater  
Delay Tolerance From Tap To Tap  
± 2 Nsec or 7% whichever is greater  
Performance Characteristics apply at  
above listed Test Conditions.

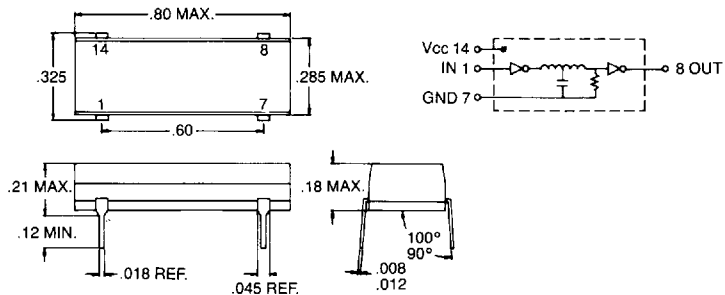
#### ELECTRICAL CHARACTERISTICS

Supply Voltage, V<sub>cc</sub>  
4.75 to 5.25 Volts  
Logic 1 Input Current  
20 Microamp max.  
Logic 0 Input Current  
-0.4 Milliamp max.  
Logic 1 Output Voltage  
2.7 Volts min.  
Logic 0 Output Voltage  
0.5 Volts max.  
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%  
10 TTL Loads/Tap max.  
20 TTL Loads/Unit max.  
—Compatible with TTL and DTL circuits  
—Other delays and tolerances upon  
request



#### 5 TAP

Part Number	Total Delay 1, 3	Delay/Tap 1, 3	Rise Time 2, 3
A447-0025-09	25NS	5NS	8NS
A447-0050-09	50NS	10NS	8NS
A447-0100-09	100NS	20NS	8NS
A447-0150-09	150NS	30NS	8NS
A447-0200-09	200NS	40NS	8NS
A447-0250-09	250NS	50NS	8NS
A447-0300-09	300NS	60NS	8NS
A447-0350-09	350NS	70NS	8NS
A447-0400-09	400NS	80NS	8NS
A447-0450-09	450NS	90NS	8NS
A447-0500-09	500NS	100NS	8NS



#### FIXED DELAY

Part Number	Total Delay 1, 3	Rise Time 2, 3	Part Number	Total Delay 1, 3	Rise Time 2, 3
A447-0010-08	10NS	8NS	A447-0125-08	125NS	8NS
A447-0020-08	20NS	8NS	A447-0150-08	150NS	8NS
A447-0030-08	30NS	8NS	A447-0175-08	175NS	8NS
A447-0040-08	40NS	8NS	A447-0200-08	200NS	8NS
A447-0050-08	50NS	8NS	A447-0250-08	250NS	8NS
A447-0060-08	60NS	8NS	A447-0300-08	300NS	8NS
A447-0070-08	70NS	8NS	A447-0350-08	350NS	8NS
A447-0080-09	80NS	8NS	A447-0400-08	400NS	8NS
A447-0090-08	90NS	8NS	A447-0450-08	450NS	8NS
A447-0100-08	100NS	8NS	A447-0500-08	500NS	8NS

1 Delays measured at 1.5 Volt level on Leading Edge only.  
2 Rise Times measured from .8 Volts to 2 Volts.  
3 Measured with no loads on taps.

Specifications Subject To Change Without Notice