

## DIGITAL DELAY LINE SERIES A447 TRIPLE OUTPUT MODULE

AVAILABLE IN FAST LOGIC  
REQUEST A427 SERIES

### 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<sub>CC</sub> Constant "0" in  
 115 mA max  
 Constant "1" in  
 90 mA max.  
 Supply Voltage, V<sub>CC</sub> 5.0 Volts  
 Ambient Temperature 25°C

#### PERFORMANCE CHARACTERISTICS

Delay Tolerance From Input To Output  
 As Specified In Table  
 Performance Characteristics apply at  
 above listed Test Conditions.

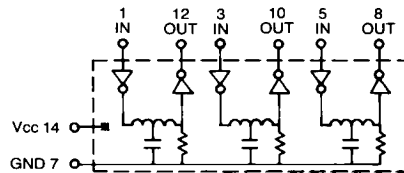
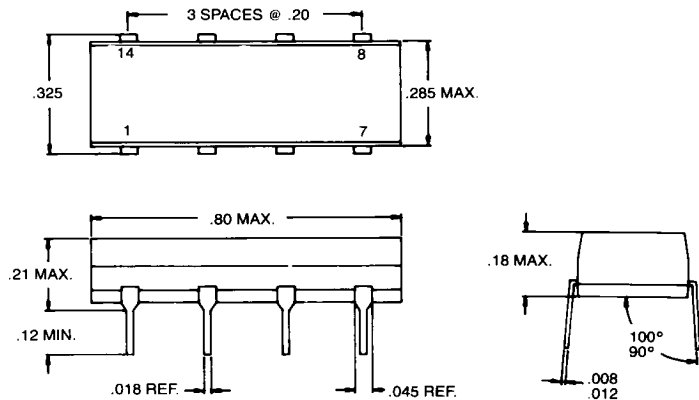
#### ELECTRICAL CHARACTERISTICS

Supply Voltage, V<sub>CC</sub>  
 4.75 to 5.25 Volts  
 Logic 1 Input Current  
 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.  
 Operating Temperature Range  
 0°C To 70°C  
 Temperature Coefficient of Total Delay  
 1200PPM/°C Typical  
 Minimum Input Pulse Width  
 100% of Total Delay  
 Maximum Duty Cycle  
 50%

#### DRIVE CAPABILITIES

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

—Compatible with TTL and DTL circuits  
 —Other delays and tolerances upon  
 request



Part Number	Total Delay 1, 3	Rise Time 2, 3
A447-0010-A3	10 NS ± 1.5 NS	3 NS
A447-0020-A3	20 NS ± 1.5 NS	3 NS
A447-0030-A3	30 NS ± 2.0 NS	3 NS
A447-0040-A3	40 NS ± 2.0 NS	3 NS
A447-0050-A3	50 NS ± 2.5 NS	3 NS
A447-0060-A3	60 NS ± 3.0 NS	4 NS
A447-0070-A3	70 NS ± 3.5 NS	4 NS
A447-0080-A3	80 NS ± 4.0 NS	4 NS
A447-0090-A3	90 NS ± 4.0 NS	4 NS
A447-0100-A3	100 NS ± 5.0 NS	4 NS

1 Delays measured at 1.5 Volt Leading Edge only.  
 2 Rise Times measured from .75 Volts to 2.4 Volts.  
 3 Measured with 1 STTL load (15PF) on each output.

Specifications Subject To Change Without Notice