

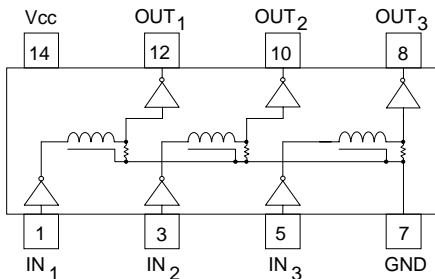
AI3D Series FAST / TTL Buffered Triple Independent Delays

- 14-Pin Package Surface Mount and Thru-hole Versions
- FAST/TTL Logic Buffered
- 3 Independent Equal Delay Lines
*** Unique Delays Per Line are Available ***
- Operating Temperature Range
0°C to +70°C
- 8-pin DIP/SMD Versions: FAM3D Series
14-pin Low Cost DIP: MSDM Series

Electrical Specifications at 25°C

| Delay Tolerance (ns) | 14-Pin 74F/TTL Buffered Triple Independent Delays | |
|----------------------|---|-----------|
| | DIP P/N | G-SMD P/N |
| 5 ± 1.00 | AI3D-5 | AI3D-5G |
| 6 ± 1.00 | AI3D-6 | AI3D-6G |
| 7 ± 1.00 | AI3D-7 | AI3D-7G |
| 8 ± 1.00 | AI3D-8 | AI3D-8G |
| 9 ± 1.00 | AI3D-9 | AI3D-9G |
| 10 ± 1.50 | AI3D-10 | AI3D-10G |
| 11 ± 1.50 | AI3D-11 | AI3D-11G |
| 12 ± 1.50 | AI3D-12 | AI3D-12G |
| 15 ± 2.00 | AI3D-15 | AI3D-15G |
| 20 ± 2.00 | AI3D-20 | AI3D-20G |
| 25 ± 2.00 | AI3D-25 | AI3D-25G |
| 30 ± 2.00 | AI3D-30 | AI3D-30G |
| 35 ± 2.00 | AI3D-35 | AI3D-35G |
| 40 ± 2.00 | AI3D-40 | AI3D-40G |
| 50 ± 2.50 | AI3D-50 | AI3D-50G |

AI3D 14-Pin Schematic



TEST CONDITIONS -- FAST / TTL

- V_{cc} Supply Voltage 5.00VDC
 Input Pulse Voltage 3.20V
 Input Pulse Rise Time 3.0 ns max.
 Input Pulse Width / Period 1000 / 2000 ns
1. Measurements made at 25°C
 2. Delay Times measured at 1.50V level of leading edge.
 3. Rise Times measured from 0.75V to 2.40V.
 4. 10pf probe and fixture load on output under test.

OPERATING SPECIFICATIONS

- V_{cc} Supply Voltage 5.00 ± 0.25 VDC
 I_{cc} Supply Current 45 mA typ, 95 mA max.
 Logic "1" Input: V_{IH} 2.00 V min., 5.50 V max.
 I_{IH} 20 µA max. @ 2.70V
 Logic "0" Input: V_{IL} 0.80 V max.
 I_{IL} -0.6 mA mA
 V_{OH} Logic "1" Voltage Out 2.40 V min.
 V_{OL} Logic "0" Voltage Out 0.50 V max.
 P_{WI} Input Pulse Width 100% of Delay min.
 Operating Temperature Range 0° to 70°C
 Storage Temperature Range -65° to +150°C

P/N Description

Buffered Triple Delays: AI3D - XXX X
 14-pin Com'l 74F / TTL

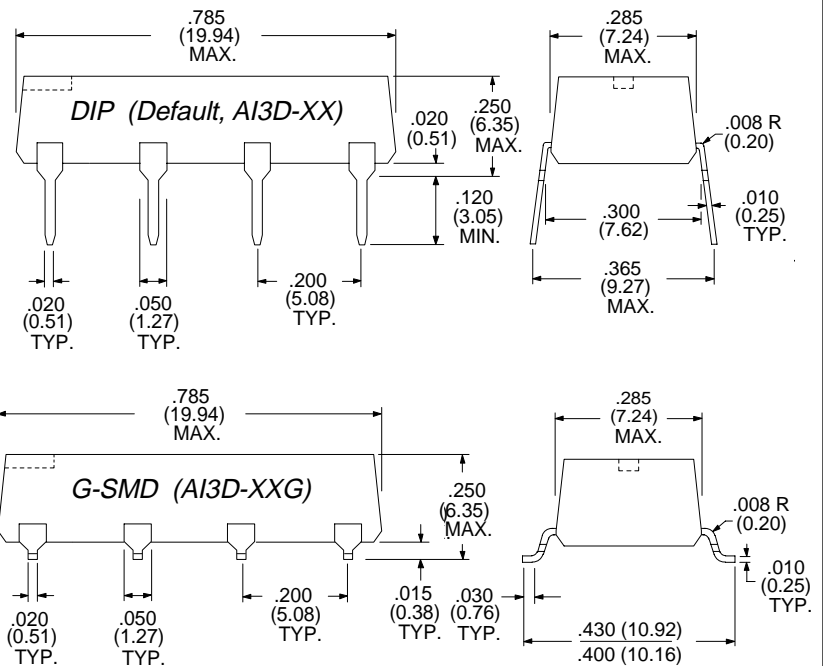
Delay Per Line in nanoseconds (ns)

Lead Style: Blank = Auto-Insertable DIP
 G = "Gull Wing" Surface Mount
 J = "J" Bend Surface Mount

Examples: AI3D-20 = 20ns Triple 74F/TTL, DIP
 AI3D-5G = 5ns Triple 74F/TTL, G-SMD

Dimensions in Inches (mm)

Commercial Grade 14-Pin Package with Unused Leads Removed as per Schematic.



Specifications subject to change without notice.

For other values & Custom Designs, contact factory.

AI3D 9902