

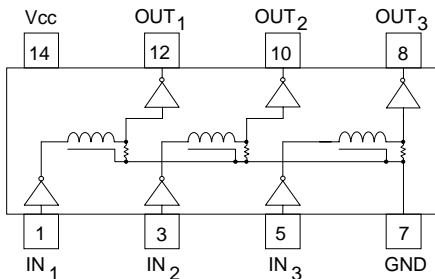
AI3D Series FAST / TTL Buffered Triple Independent Delays

- 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.

Dimensions in Inches (mm)

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

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

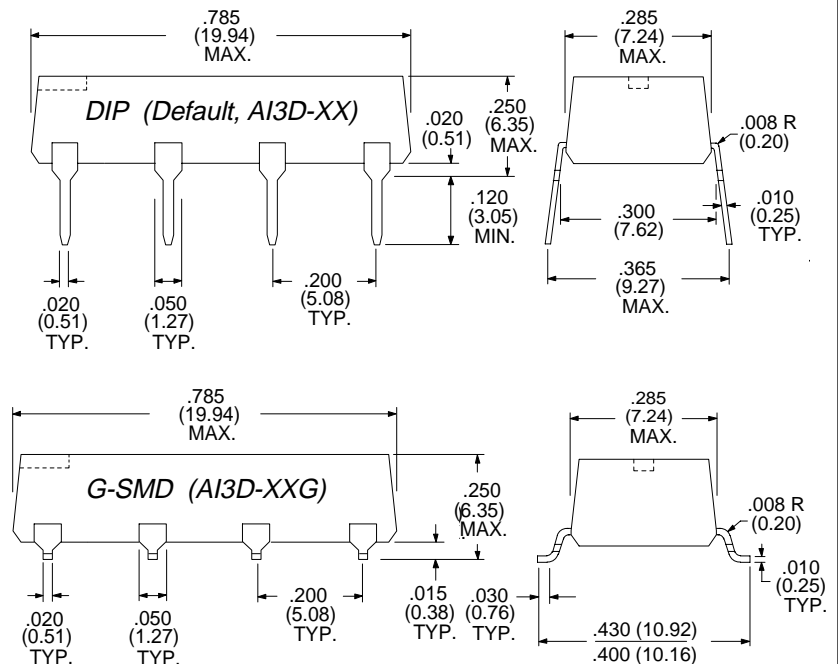
P/N Description

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



Specifications subject to change without notice.

For other values & Custom Designs, contact factory.

AI3D 9902