

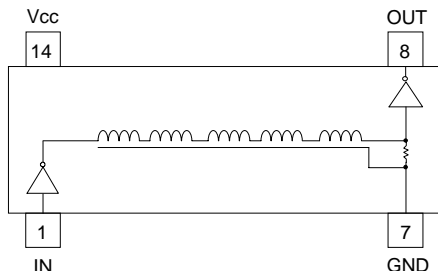
# FSDM Series FAST / TTL Buffered Single Output Delay Lines

- 14-Pin Package Commercial and Mil-Grade Versions
- FAST/TTL Logic Buffered
- Operating Temperature Ranges 0°C to +70°C, or -55°C to +125°C
- 8-pin DIP/SMD Versions: FAMDL Series  
14-pin DIP/SMD Versions: FAIDL Series

Electrical Specifications at 25°C

Delay Tolerance (ns)	14 Pin DIL TTL Buffered Triple Independent Delays	
	Commercial Part Number	MIL-Grade Part Number
5 ± 1.00	FSDM-5	FSDM3-5M
6 ± 1.00	FSDM-6	FSDM3-6M
7 ± 1.00	FSDM-7	FSDM3-7M
8 ± 1.00	FSDM-8	FSDM3-8M
9 ± 1.00	FSDM-9	FSDM3-9M
10 ± 1.50	FSDM-10	FSDM3-10M
15 ± 2.00	FSDM-15	FSDM3-15M
20 ± 2.00	FSDM-20	FSDM3-20M
25 ± 2.00	FSDM-25	FSDM3-25M
30 ± 2.00	FSDM-30	FSDM3-30M
35 ± 2.00	FSDM-35	FSDM3-35M
40 ± 2.00	FSDM-40	FSDM3-40M
50 ± 2.50	FSDM-50	FSDM3-50M
60 ± 3.00	FSDM-60	FSDM3-60M
70 ± 3.50	FSDM-70	FSDM3-70M
75 ± 3.75	FSDM-75	FSDM3-75M
80 ± 4.00	FSDM-80	FSDM3-80M
100 ± 5.0	FSDM-100	FSDM3-100M
125 ± 6.25	FSDM-125	FSDM3-125M
250 ± 12.5	FSDM-250	FSDM3-250M
500 ± 25.0	FSDM-500	FSDM3-500M
1000 ± 50.0	FSDM-1000	FSDM3-1000

FSDM 14-Pin Schematic



## TEST CONDITIONS -- FAST / TTL

V<sub>CC</sub> Supply Voltage ..... 5.00VDC  
 Input Pulse Voltage ..... 3.20V  
 Input Pulse Rise Time ..... 3.0 ns max.  
 Input Pulse Width / Period ..... 1000 / 2000 ns

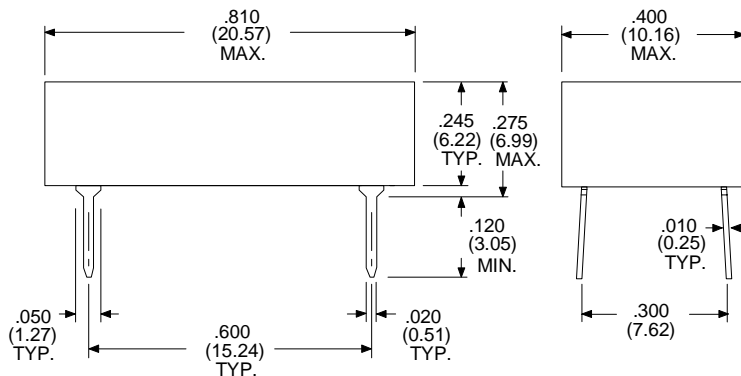
1. Measurements made at 25°C
2. Delay Times measured at 1.50V level of leading edge.
3. Rise Times measured from 0.75V to 2.40V.
4. 10pf probe and fixture load on output under test.

Dimensions in Inches (mm)

Commercial Grade 14-Pin Package with Unused Leads Removed as per Schematic. (For Mil-Grade FSDM3 the Height is 0.335")

## OPERATING SPECIFICATIONS

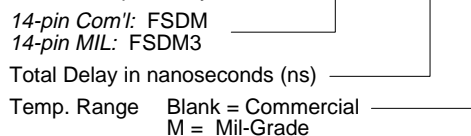
V<sub>CC</sub> Supply Voltage ..... 5.00 ± 0.25 VDC  
 I<sub>CC</sub> Supply Current ..... 25 mA typ, 48 mA max.  
 Logic "1" Input: V<sub>IH</sub> ..... 2.00 V min., 5.50 V max.  
                   I<sub>IH</sub> ..... 20 µA max. @ 2.70V  
 Logic "0" Input: V<sub>IL</sub> ..... 0.80 V max.  
                   I<sub>IL</sub> ..... -0.6 mA mA  
 V<sub>OH</sub> Logic "1" Voltage Out ..... 2.40 V min.  
 V<sub>OL</sub> Logic "0" Voltage Out ..... 0.50 V max.  
 P<sub>WI</sub> Input Pulse Width ..... 40% of Delay min.  
 Operating Temperature Range ..... 0° to 70°C  
 Storage Temperature Range ..... -65° to +150°C



## P/N Description

**FSDM - XXX X**

Buffered Triple Delays:



Examples: FSDM-25 = 25ns Delay  
                   74F, 14-Pin Thru-hole  
                   FSDM3-50M = 50ns Delay  
                   74F, 14-Pin, Mil-Grade

**MIL-GRADE:** FSDM3 Military Grade delay lines use integrated circuits screened to MIL-STD-883B with an operating temperature range of -55 to +125°C. These devices have a package height of .335"

**Auto-Insertable DIP and Surface Mount Versions:**  
 Refer to **FAIDL Series**, same 14-pin footprint.  
 For space saving, refer to **FAMDL 8-pin Series**

Specifications subject to change without notice.

For other values & Custom Designs, contact factory.

FSDM 9901



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