

FAST / TTL Logic Buffered Delay Thru-hole Modules

5-Tap: DTZM • Single: FSDM • Triple: MSDM

Electrical Specifications at 25°C

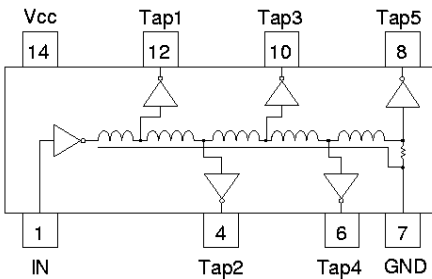
TTL Buffered 5 Tap P/N	Tap Delay Tolerances +/- 5% or 2ns					Tap-to-Tap (ns)
	Tap 1	Tap 2	Tap 3	Tap 4	Total - Tap 5	
DTZM1-9	5.0	6.0	7.0	8.0	9 ± 1.0	*** 1.0 ± 0.5
DTZM1-13	5.0	7.0	9.0	11.0	13 ± 1.5	*** 2.0 ± 0.8
DTZM1-20	4.0	8.0	12.0	16.0	20 ± 1.5	4.0 ± 1.5
DTZM1-25	5.0	10.0	15.0	20.0	25 ± 2.0	5.0 ± 2.0
DTZM1-30	6.0	12.0	18.0	24.0	30 ± 2.0	6.0 ± 2.0
DTZM1-35	7.0	14.0	21.0	28.0	35 ± 2.0	7.0 ± 2.0
DTZM1-40	8.0	16.0	24.0	32.0	40 ± 2.0	8.0 ± 2.0
DTZM1-50	10.0	20.0	30.0	40.0	50 ± 2.5	10 ± 2.0
DTZM1-60	12.0	24.0	36.0	48.0	60 ± 3.0	12 ± 2.0
DTZM1-75	15.0	30.0	45.0	60.0	75 ± 3.75	15 ± 2.5
DTZM1-100	20.0	40.0	60.0	80.0	100 ± 5.0	20 ± 3.0
DTZM1-125	25.0	50.0	75.0	100.0	125 ± 6.25	25 ± 3.0
DTZM1-150	30.0	60.0	90.0	120.0	150 ± 7.5	30 ± 3.0
DTZM1-200	40.0	80.0	120.0	160.0	200 ± 10.0	40 ± 4.0
DTZM1-250	50.0	100.0	150.0	200.0	250 ± 12.5	50 ± 5.0
DTZM1-500	100.0	200.0	300.0	400.0	500 ± 25.0	100 ± 10.0
DTZM1-800	160.0	320.0	480.0	640.0	800 ± 40.0	160 ± 16.0
DTZM1-1000	200.0	400.0	600.0	800.0	1000 ± 0.0	160 ± 16.0

** These part numbers do not have 5 equal taps.
Specified Tap-to-Tap Delays are referenced to Tap 1.

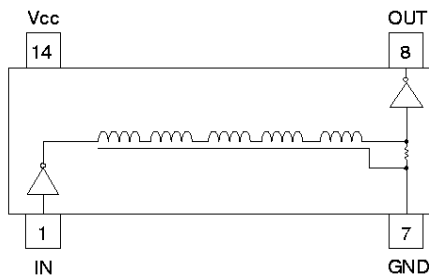
Electrical Specifications at 25°C

Delay (ns)	TTL Buffered Single Delays	TTL Buffered Triple Delays
5 ± 1.00	FSDM-5	MSDM-5
6 ± 1.00	FSDM-6	MSDM-6
7 ± 1.00	FSDM-7	MSDM-7
8 ± 1.00	FSDM-8	MSDM-8
9 ± 1.00	FSDM-9	MSDM-9
10 ± 1.50	FSDM-10	MSDM-10
15 ± 2.00	FSDM-15	MSDM-15
20 ± 2.00	FSDM-20	MSDM-20
25 ± 2.00	FSDM-25	MSDM-25
30 ± 2.00	FSDM-30	MSDM-30
35 ± 2.00	FSDM-35	MSDM-35
40 ± 2.00	FSDM-40	MSDM-40
45 ± 2.25	FSDM-45	MSDM-45
50 ± 2.50	FSDM-50	MSDM-50
60 ± 3.00	FSDM-60	MSDM-60
70 ± 3.50	FSDM-70	MSDM-70
75 ± 3.75	FSDM-75	MSDM-75
100 ± 5.0	FSDM-100	MSDM-100

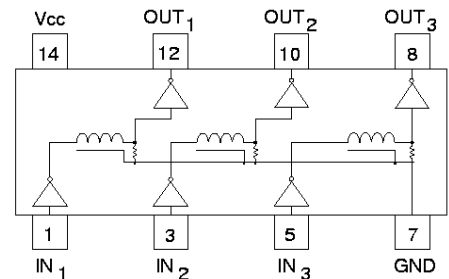
DTZM1 Style Schematic



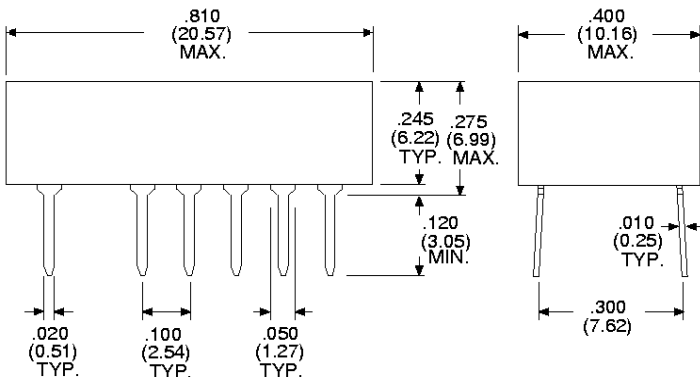
FSDM Style Schematic



MSDM Style Schematic



Dimensions in Inches (mm)
14-Pin Package with Unused Leads Removed Per Schematic



GENERAL: For Operating Specifications and Test Conditions, see Tables I and VI on page 5 of this catalog. Delays are specified for the Leading Edge.

Operating Temp. Range 0°C to +70°C
 Temperature Coefficient of Delay 500ppm/°C typical
 Min. Input Pulse Width, **DTZM** 40% of total delay
 Min. Input Pulse Width, **FSDM** 40% of total delay
 Min. Input Pulse Width, **MSDM** 100% of total delay
 Supply Current, I_{CC} , **DTZM** 25 mA typ., 48 mA max.
 Supply Current, I_{CC} , **FSDM** 25 mA typ., 48 mA max.
 Supply Current, I_{CC} , **MSDM** 45 mA typ., 95 mA max.

MIL-GRADE: These Military Grade delay lines use I.C.'s screened to MIL-STD-883B with an operating temperature range of -55 to +125°C, and have the suffix "M": **DTZM3-XXXM**, **FSDM-XXXM**, and **MSDM-XXXM**. MIL devices package height of .335"

Auto-Insertable DIP and Surface Mount Versions available: Refer to FAIDM and FAI3D Series