

## DIGITAL DELAY LINE SERIES 0443 ECL 10K DELAY MODULE 10 TAP

### TECHNICAL INFORMATION

#### TEST CONDITIONS

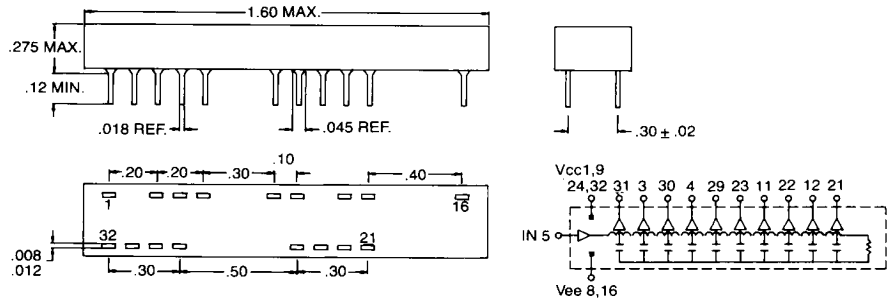
Logic 1 - 0.9 Volts  
 Logic 0 - 1.8 Volts  
 Rise Time 2.0 Nsec (20% to 80%)  
 Pulse Width Total Delay + 10.0 Nsec  
 Pulse Period 4 x Pulse Width  
 Supply Voltage, Vee - 5.2 Volts  
 Output Terminations 50 Ohm  
 ± 1% to - 2 Volts  
 Ambient Temperature 25°C

#### PERFORMANCE CHARACTERISTICS

Delay Tolerances  
 As Specified In Table  
 Performance Characteristics apply at  
 above listed Test Conditions.

#### ELECTRICAL CHARACTERISTICS

Supply Voltage, Vee - 4.94 To - 5.46 Volts  
 Logic 1 Input Voltage - 0.98 Volts min.  
 Logic 1 Input Current 265 Microamp max.  
 Logic 1 Output Voltage - 0.96 Volts min.  
 Logic 0 Input Voltage - 1.63 Volts max.  
 Logic 0 Input Current 0.5 Microamp min.  
 Logic 0 Output Voltage - 1.65 Volts max.  
 Operating Temperature Range - 30°C To 85°C  
 Temperature Coefficient Of Total Delay 300PPM/°C Typical  
 Minimum Input Pulse Width 40% Of Total Delay  
 Maximum Duty Cycle 50%  
 —Compatible with ECL10K  
 —Other delays and tolerances upon request



Part Number	Tap 1 1, 3, 4	Tap 2 1, 3, 4	Tap 3 1, 3, 4	Tap 4 1, 3, 4	Tap 5 1, 3, 4	Tap 6 1, 3, 4
0443-0011-10	2 ± .5	3 ± .5	4 ± .5	5 ± 1	6 ± 1	7 ± 1
0443-0020-10	2 ± .5	4 ± .5	6 ± 1	8 ± 2	10 ± 2	12 ± 1
0443-0030-10	3 ± .5	6 ± 1	9 ± 2	12 ± 2	15 ± 2	18 ± 2
0443-0040-10	4 ± .5	8 ± 2	12 ± 2	16 ± 2	20 ± 2	24 ± 2
0443-0050-10	5 ± 1	10 ± 2	15 ± 2	20 ± 2	25 ± 2	30 ± 2
0443-0060-10	6 ± 1	12 ± 2	18 ± 2	24 ± 2	30 ± 2	36 ± 2
0443-0070-10	7 ± 1	14 ± 2	21 ± 2	28 ± 2	35 ± 2	42 ± 2
0443-0080-10	8 ± 2	16 ± 2	24 ± 2	32 ± 2	40 ± 2	48 ± 2
0443-0090-10	9 ± 2	18 ± 2	27 ± 2	36 ± 2	45 ± 2	54 ± 2
0443-0100-10	10 ± 2	20 ± 2	30 ± 2	40 ± 2	50 ± 2	60 ± 3
0443-0150-10	15 ± 2	30 ± 2	45 ± 2	60 ± 3	75 ± 3	90 ± 3
0443-0200-10	20 ± 2	40 ± 2	60 ± 3	80 ± 3	100 ± 3	120 ± 4
0443-0250-10	25 ± 2	50 ± 2	75 ± 3	100 ± 3	125 ± 4	150 ± 4
0443-0300-10	30 ± 2	60 ± 3	90 ± 3	120 ± 4	150 ± 5	180 ± 6
0443-0350-10	35 ± 2	70 ± 3	105 ± 4	140 ± 5	175 ± 5	210 ± 7
0443-0400-10	40 ± 2	80 ± 3	120 ± 4	160 ± 5	200 ± 6	240 ± 7
0443-0450-10	45 ± 2	90 ± 3	135 ± 4	180 ± 6	225 ± 7	270 ± 8
0443-0500-10	50 ± 2	100 ± 3	150 ± 5	200 ± 6	250 ± 8	300 ± 9

Part Number	Tap 7 1, 3, 4	Tap 8 1, 3, 4	Tap 9 1, 3, 4	Output 1, 3, 4	Rise Time 2, 3, 4
0443-0011-10	8 ± 2	9 ± 2	10 ± 2	11 ± 2	4
0443-0020-10	14 ± 2	16 ± 2	18 ± 2	20 ± 2	4
0443-0030-10	21 ± 2	24 ± 2	27 ± 2	30 ± 2	4
0443-0040-10	28 ± 2	32 ± 2	36 ± 2	40 ± 2	4
0443-0050-10	35 ± 2	40 ± 2	45 ± 2	50 ± 2	4
0443-0060-10	42 ± 2	48 ± 2	54 ± 2	60 ± 3	4
0443-0070-10	49 ± 2	56 ± 2	63 ± 3	70 ± 3	4
0443-0080-10	56 ± 2	64 ± 3	72 ± 3	80 ± 3	4
0443-0090-10	63 ± 3	72 ± 3	81 ± 3	90 ± 3	5
0443-0100-10	70 ± 3	80 ± 3	90 ± 3	100 ± 3	5
0443-0150-10	105 ± 4	120 ± 4	135 ± 4	150 ± 5	8
0443-0200-10	140 ± 5	160 ± 5	180 ± 5	200 ± 6	10
0443-0250-10	175 ± 5	200 ± 6	225 ± 7	250 ± 8	15
0443-0300-10	210 ± 7	240 ± 7	270 ± 8	300 ± 9	15
0443-0350-10	245 ± 8	280 ± 9	315 ± 10	350 ± 11	20
0443-0400-10	280 ± 9	320 ± 10	360 ± 11	400 ± 12	20
0443-0450-10	315 ± 10	360 ± 11	405 ± 12	450 ± 14	25
0443-0500-10	350 ± 11	400 ± 12	450 ± 14	500 ± 15	25

1 Delays measured at 50% of the pulse on leading edge only.  
 2 Rise Times measured from 20% to 80% of the pulse.  
 3 All timing in NS.

Specifications Subject To Change Without Notice