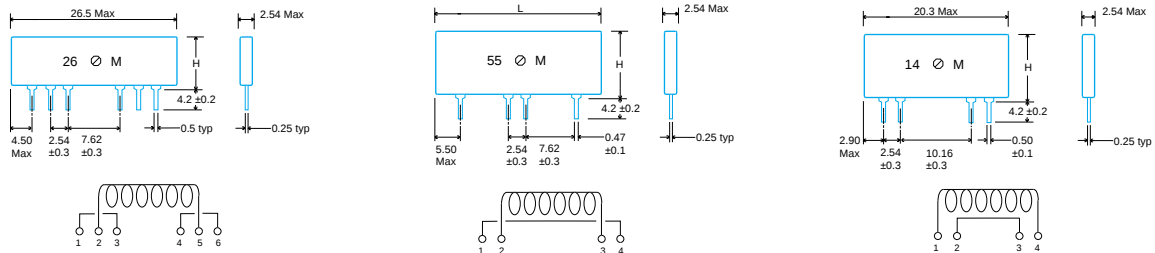


DL1L Series

1.0 Description

Performance to 5 gigahertz. For many high frequency applications, these passive, discrete, tight tolerance (± 50 picosecond) delay lines can be used to help solve your TTL, CMOS, and ECL timing and clock deskew needs. Samples are available from 0.1 to 5.1 ns in 0.1 ns steps.

2.0 Mechanical dimension mm



Time delay	Height (H)	Code
0.1 - 0.5 ns	7.60 max	W
0.6 - 2.6 ns	10.10 max	X
2.7 - 3.5 ns	14.00 max	Y
3.6 - 5.1 ns	16.45 max	Z

Time delay	Height (H)	Code	Length (L)
0.1 - 1.3 ns	7.50 max	3	26.5 Max
1.4 - 2.5 ns	10.10 max	4	
2.6 - 3.4 ns	12.70 max	5	27.9 Max
3.6 - 10.0 ns	15.50 max	O	

Time delay	Td Tol.	Height (H)	Code
0.1 - 1.2 ns	± 0.05 ns	7.50 max	B
1.3 - 2.6 ns	± 0.05 ns		
2.8 ns	± 0.10 ns	12.00 max	F
3.0 - 5.0 ns	± 0.25 ns		

3.0 Electrical

Type	DL1L5 (W,X,Y,Z)	DL1L5 (3,4,5,O)	DL1L8 (B, F)
Time delay range	0.1~5.1ns (0.1ns step)	0.1~2.50ns (0.1ns step) 2.6~4.9ns (0.2ns step) 5.0~10.0ns (0.5ns step)	0.1~2.6ns (0.1ns step) 3.0~5.0ns (0.5ns step)
Time delay tolerance	± 0.050 ns	± 0.05 ns ± 0.100 ns ± 0.250 ns	see table above
Characteristic impedance	50 ± 5 ohm		
Return loss	20dB min		
DC Resistance	0.1~0.5ns : 0.5 ohm max 0.6~2.6ns : 1.0 ohm max 2.7~3.5ns : 2.0 ohm max 3.6~5.1ns : 3.0 ohm max	0.1~1.0ns : 0.8 ohm max 1.1~10ns : 0.8 ohm max/1ns	0.1~1.0ns : <1.7ohm max 0.1~5.0ns : <1.7ohm/ns
Rise / fall time	1ns or less	1ns or less 2ns or less	<1ns
Rated current	100mA		
Distortion	$\pm 10\%$		
Temp. coefficient to Td	0 to +150 ppm/ $^{\circ}$ C		
Insulation resistance	>100Mohm 50V		
Operating temp.	-40 to +85 $^{\circ}$ C		
Storage temp.	-55 to +155 $^{\circ}$ C		

4.0 Part Number

DL _____ Product designator
 1L _____ Circuit/element qualifier
 5 _____ Impedance (5 = 50 ohm), (8 = 75 ohm)
 W _____ Height code - see tables above
 K _____ Lead frame
 260 _____ Time delay (260 = 2.6ns)
 S _____ Serial code