**DL-DC3G-10-5-Q** is a four channel delay line, which is programmable, designed for adjusting the time delay or phase of radio, microwave or even digital signals with bandwidths from DC to 3 GHz.

Features:

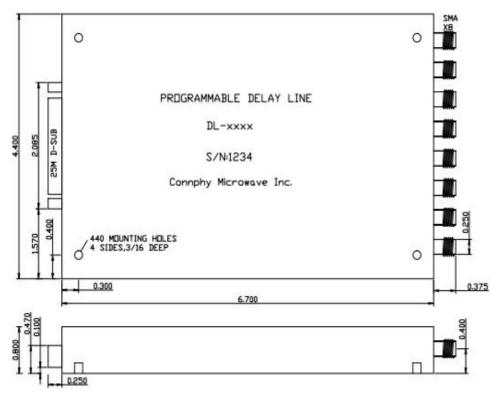
frequency range: DC~3G, with 4 independent channels

10 bits range

Step size option: 5ps, 10ps, or 20ps; XX-XX-5-Q for 5ps step size.

Time or phase shifting, with very compact size

## **Mechanical Outline(Inch):**



## **Environmental Ratings:**

Temperature: -25°C to +80 °C Operating

-65 °C to +100 °C Non-Operating

Vibration: MIL-STD-810F, Method 514.5 Cond. B
Altitude: MIL-STD-202F, Method 105C Cond. B
Temperature Cycle: MIL-STD-202F, Method 107D Cond. A

## **Specifications:**

Bandwidth(4dB): 3 GHz

Step size(ps): 5, 10, 20 optional,

eg: DL-DC3G-10-5-Q for 5ps step

size

Linearity:

Channels: 4 independent channels

Accuracy: 1 LSB

VSWR max: 1.3 for DC to 2 GHz

1.5 for 2 to 3 GHz

Insertion loss: <6.0 dB DC to 2 GHz

<8 dB 2 to 3 GHz +0.18 dB/ns at 2 GHz

+0.3 dB DC to 2 GHz

+0.6 dB 2 to 3 GHz

Dispersion (1-3GHz): -0.0007 x (total delay)

Insertion delay:

Control data latch setup time:

Control data latch hold time:

Control propagation delay:

Delay-state switch time:

Input power:

2.0 ns

4.5 ns

28 ns Max

29 ns

20 dBm

Delay Line DL-DC3G-10-5-Q					
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	CONNPHY Microwave Inc.		
CHECKRD:	DATE: 15/03/15	SHEET: 1 OF 2	www.connphy.com sales@connphy.com		
ISSUED:	SIZE: A	SCALE : N / A	Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.		

**DL-DC3G-10-5-Q** is a four channel delay line, which is programmable, designed for adjusting the time delay or phase of radio, microwave or even digital signals with bandwidths from DC to 3 GHz.

Features:

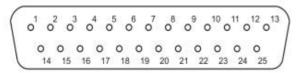
frequency range: DC~3G, with 4 independent channels

10 bits range

Step size option: 5ps, 10ps, or 20ps; XX-XX-5 for 5ps step size.

Time or phase shifting, with very compact size

## **Pin Definition:**



DO - D9 respectively active high
A3 "4"
A1 "2"
NC
+5.0V Power
Ground
DS = Device Select active low
WE = Write Enable active low
A2 "3"
A0 "1" Channel select, active high

Delay Line DL-DC3G-10-5-Q				
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	CONNPHY Microwave Inc.	
CHECKRD:	DATE: 15/03/15	SHEET: 2 OF 2	www.connphy.com sales@connphy.com	
ISSUED:	SIZE: A	SCALE : N / A	Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.	