

**CDPS-12G18G-360-6** is an 6-Bit Digital Phase Shifter that operates over the 12.0 GHz to 18.0 GHz frequency range. This model offers 360° of phase shift with an LSB of 5.625°.

**Features:**

- 12.0-18.0 GHz
- 5.625° LSB, 360° Range
- TTL Driver

**Specifications:**

Frequency Range:	12.0-18.0 GHz
Insertion Loss:	9.0 dB Typ
Number of Bits:	6
Least Significant Bit(LSB):	5.625°
Phase Range:	360°
Phase accuracy:	+/-4° Typ
Amplitude Balance:	+/-0.5 dB Max
VSWR(dB):	2.0:1 Typ
Power Handling:	+23 dBm Max
Switching Time:	100 nsec Typ
Control Logic:	TTL
Power supply:	+5 Vdc @ 33 mA, Typ

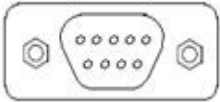
**Environmental Ratings:**


Temperature:	-45°C to +85 °C Operating -55 °C to +85°C Non-Operating
Vibration:	MIL-STD-202F, Method 204D Cond. B
Altitude:	MIL-STD-202F, Method 105C Cond. B
Temperature Cycle:	MIL-STD-202F, Method 107D Cond. A

**Mechanical Specifications:**

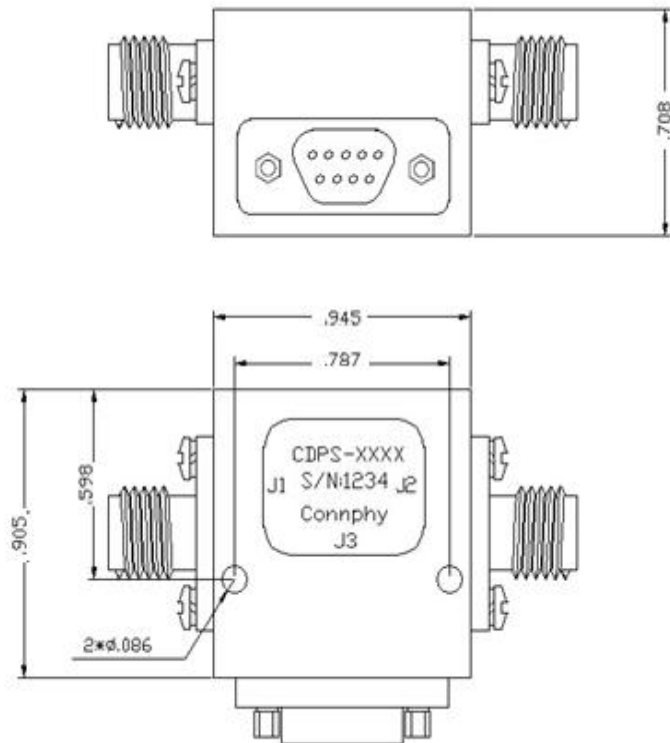
Parameter	Specification
Dimensions WxHxD	0.945X0.905X0.708 inches
RF Connectors In/Out	SMA-Female
DC Connector	MICRO-D9
Material	Aluminum

**DC Connector PIN Assignment:**

Pin	Function	Pin Definition
1-6	Bit1-Bit6	
7	+5V	
8	NC	
9	GND	

6-Bit Digital Phase Shifter CDPS-12G18G-360-6			
DRAWN:	DWG NO.:	REV CODE: Rev.1.0	 <a href="http://www.connphy.com">www.connphy.com</a> <a href="mailto:sales@connphy.com">sales@connphy.com</a>
CHECKRD:	DATE: 08/07/15	SHEET : 1 OF 2	
ISSUED:	SIZE: A	SCALE : N / A	Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.

## Mechanical Outline(Inches) :



## Environmental Ratings:


Temperature:	-45°C to +85 °C Operating -55 °C to +85°C Non-Operating
Vibration:	MIL-STD-202F, Method 204D Cond. B
Altitude:	MIL-STD-202F, Method 105C Cond. B
Temperature Cycle:	MIL-STD-202F, Method 107D Cond. A

## Truth Table :

TTL Input for 8 bits resolution						Phase Shift RFin - RfOut
Bit 1	Bit 2	Bit 3	Bit 4	Bit 5	Bit 6	
0	0	0	0	0	0	Reference
1	0	0	0	0	0	5.625°
0	1	0	0	0	0	11.25°
0	0	1	0	0	0	22.50°
0	0	0	1	0	0	45.00°
0	0	0	0	1	0	90.00°
0	0	0	0	0	1	180.00°
1	1	1	1	1	1	354.375

### 6-Bit Digital Phase Shifter

CDPS-12G18G-360-6

DRAWN:	DWG NO.:	REV CODE: Rev.1.0	 <a href="http://www.connphy.com">www.connphy.com</a> <a href="mailto:sales@connphy.com">sales@connphy.com</a>
CHECKRD:	DATE: 08/07/15	SHEET : 2 OF 2	
ISSUED:	SIZE: A	SCALE : N / A	
			Notes: SPEC ARE SUBJECT TO CHANGE WITHOUT NOTICE.