

Model:TLDP12G18G-360-6

6-Bit Digital Phase Shifter 12-18GHz

Feature:

- Ultra Wide Band: 12-18GHz
- High Phase Shift Accuracy
- High Phase Shift Range
- Low Phase Error

Electrical:

Parameter	Min.	Typ.	Max.	Units
Frequency range	12-18			GHz
Insertion Loss		9	10	dB
Input VSWR		1.5	2.5	:1
Output VSWR		2.5	3	:1
Phase Shift Range		360		°
Phase Flatness		±8	±10	°
Step		5.625		°
Power Handling			30	dBm
Switching speed		100		ns
DC Voltage		+5		V DC
DC Supply Current		2		mA
Number of Bits		6		Bit

Mechanical :

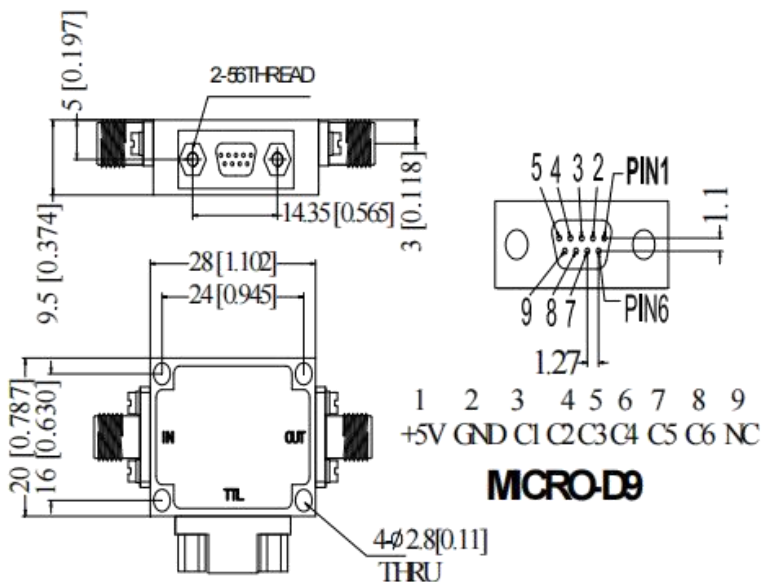
Parameter	Value	Units
Input /Output Connector	SMA Female	
DC and control interface	MICRO-D9	
Size	/	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+5V/0V
RF Input Power	30 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm(Inches)



Truth Table						
Control Voltage Input						Phase Shift (Degree)
C6	C5	C4	C3	C2	C1	
0	0	0	0	0	0	Reference
0	0	0	0	0	1	5.625
0	0	0	0	1	0	11.25
0	0	0	1	0	0	22.5
0	0	1	0	0	0	45
0	1	0	0	0	0	90
1	0	0	0	0	0	180
1	1	1	1	1	1	355

Environmental Conditions:

Parameter	Min.	Typ.	Max.	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLDP12G18G-360-6	6-Bit Digital Phase Shifter,12-18GHz,SMA(F)	Rev.1.1