

Model:TLDP15G17G-360-8

8-Bit Digital Phase Shifter 15-17GHz

Feature:

- Ultra Wide Band: 15-17GHz
- Phase Shift Range: 360°
- High Phase Shift Accuracy
- High Phase Shift Range
- Low Phase Error

Electrical:

Parameter	Min.	Typ.	Max.	Units
Frequency range	15-17			GHz
Insertion Loss		12	15	dB
Input VSWR		1.8	2.0	:1
Output VSWR		1.8	2.0	:1
Phase Shift Range		360		°
Phase accuracy		±5		°
Power Handling			+15	dBm
DC Voltage		±12		V DC
DC Supply Current		100		mA
Number of Bits		8		Bit

Mechanical :

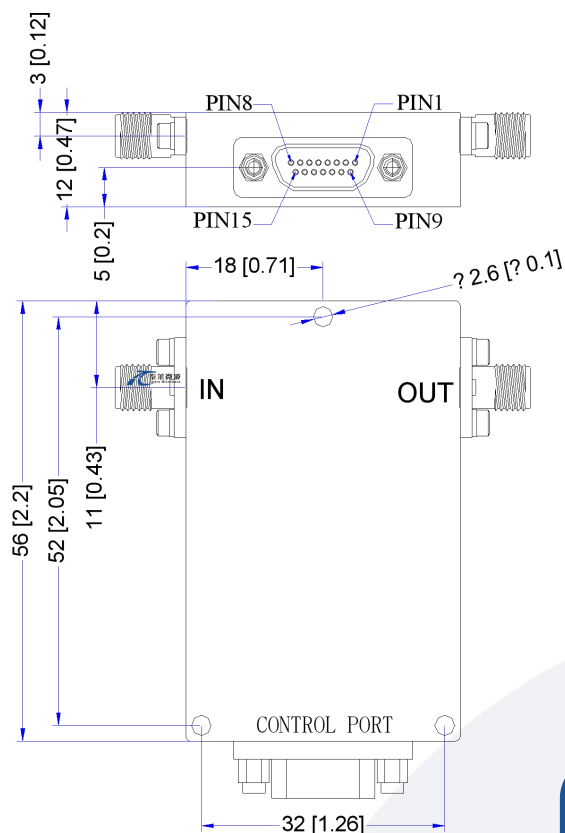
Parameter	Value	Units
Input /Output Connector	SMA Female	
DC and control interface	J30J-15ZK	
Size	/	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	TBD
RF Input Power	15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm(Inches)



Pin #	Function
1-8	C1-C8
9-11	NC
12-13	12V
14-15	GND



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Truth Table

TTL Control Input								Phase ShiftRFin - RFout
Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7	Bit8	
0	0	0	0	0	0	0	0	Reference
1	0	0	0	0	0	0	0	-1.406°
0	1	0	0	0	0	0	0	-2.812°
0	0	1	0	0	0	0	0	-5.625°
0	0	0	1	0	0	0	0	-11.25°
0	0	0	0	1	0	0	0	-22.5°
0	0	0	0	0	1	0	0	-45°
0	0	0	0	0	0	1	0	-90°
0	0	0	0	0	0	0	1	-180°
1	1	1	1	1	1	1	1	-354.375°

Low(0)=0~0.8V High(1)=2~5V

Environmental Conditions:

Parameter	Min.	Typ.	Max.	Units
Operating Temperature	-25		+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
TLDP15G17G-360-8	8-Bit Digital Phase Shifter,15-17GHz,360°,SMA	Rev.1.1