

**Model: TLDP2G7G-360-6**
**6-Bit Digital Phase Shifter  
2-7GHz**
**Feature:**

- Frequency Range: 2-7GHz
- High Phase Shift Accuracy
- High Phase Shift Range
- Low Phase Error

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
Frequency range	2-7			GHz
Phase Range		360		°
Least Significant Bit (LSB)		5.625		°
Insertion Loss		12		dB
Input VSWR		1.8		:1
Output VSWR		1.8		:1
Phase accuracy		±4		°
Power Handling			27	dBm
Switching Time		20		ns
DC Voltage		+5		V DC
DC Supply Current		20		mA
Number of Bits		6		Bit
Impedance	50			Ohms

**Mechanical Specifications:**

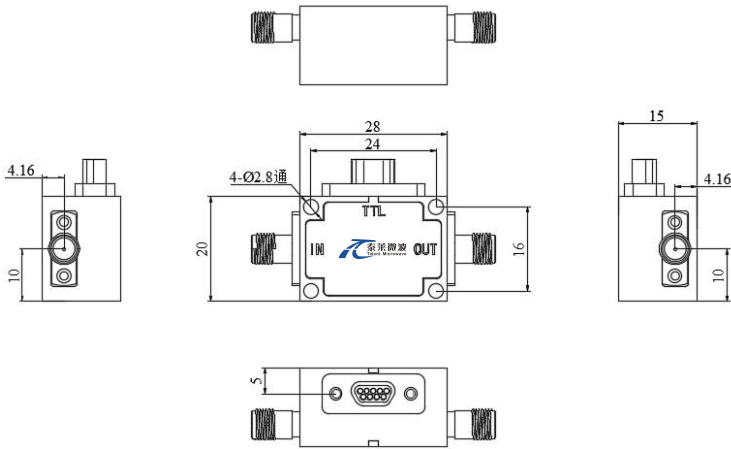
Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC and control interface	J30J-9ZKP	
Size	28*20*15	mm
Weight	/	g

**Absolute Maximum Ratings:**

Parameter	Value
Control Voltage Range	+5V (±5%)
RF Input Power No damage	27 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

**Outline Drawing:**

Unit: mm



Truth Table						
TTL Control Input						Signal Path State
Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	
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	22.5
0	0	0	1	0	0	45
0	0	0	0	1	0	90
0	0	0	0	0	1	180
1	1	1	1	1	1	354.375

<b>PIN</b>	2-7	1	8	9
<b>Function</b>	Bit6-Bit1	+5V	GND	NC

Note: +5V is "1"  
0V is "0"

**Environmental Conditions:**

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+155	°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
TLDP2G7G-360-6	6-Bit Digital Phase Shifter,2-7GHz,SMA Female	Rev.1.1