

6-Bit Digital Phase Shifter

Step 5.625° /0-360° / 0.3-3GHz /

TLDPO.3G3G-360-6

The TURDP0.3G3G-3606 is a 6-bit digital phase shifter, Step size is 5.6° providing phase shift from 0° to 360° in 5.6° steps. This design has been optimized to minimize variation in attenuation over the phase shift range. The TURDP0.3G3G-3606 is ideally suited for use where high phase accuracy with minimum loss variation over the phase shift range are required. Typical applications include communications antennas and phased array radars.

Features:

- Ultra Wide Band: 0.3-3GHz
- High Phase Shift Accuracy
- High Phase Shift Range
- Low Phase Error

Applications:

- Communications antennas
- Phased array radars

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	0.3		3	GHz
Insertion Loss		17		dB
Input VSWR		2		:1
Output VSWR		2		:1
Phase Shift Range		360		°
Phase accuracy		±3		°
Power Handling			25	dBm
Insertion loss variation over phase range			±1	dB
Switching speed		20		ns
DC Voltage		+5&-5		V DC
DC Supply Current		30		mA
Number of Bits		6		Bit

Absolute Maximum Ratings :

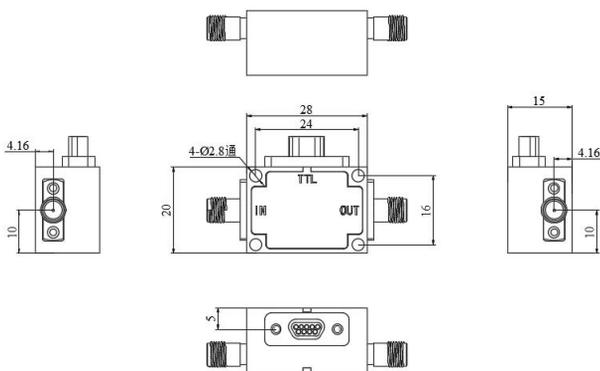
Description	Parameter	Units
Supply Bias Voltage	±5 (±5%)	

Environmental And Physical Characteristics:

Description	Parameter	Units
Operating Temperature	-55 To +125	°C
Storage Temperature	-55 to +125	°C
Material	Al	
Finish	Gold Plated	
Input /Output Connector	SMA Female	
DC and control interface	J30J-9ZKP	

Outline Drawing:

Unit:mm



Truth Table							Signal Path State
TTL Control Input							
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	

Note: +3.3V~+5V is "1"; 0V is "0"

PIN	1-6	7	8	9
Function	Bit1~Bit6	-5V	+5V	GND

Ordering Information: