

### Digital Phase Shifter, 360 Degree range 6-18GHz, 6bit, 5.625 degree step, TTL

2022-3-23



#### Description:

AT-6DPS-0618-360NCP is 6bit digital phase shifter covering 6-18GHz frequency range, with 5.625degree step and 360degree range.

The phase shifter is suitable for broadband test, and 5G millimeter wave application. There are dc blocks in RF1 and RF2 port inside. NO dc block required during operation.

More information, visit [www.atmicrowave.com](http://www.atmicrowave.com)

#### Feature

- ✓ Frequency: 6-18GHz
- ✓ 6bit, 5.625degree LSB
- ✓ Range: 360degree
- ✓ Very fast speed

#### Application

- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System
- ✓ Telecom Communication

#### Electronical Specifications:

Parameter	Min	Typical	Max
Frequency		6-18GHz	
Control Bits		6bits	
Control Step		5.625 degree	
Attenuation Range		360 degree	
Insertion Loss		-12dB	-15dB
Return Loss	-7dB	-10dB	
VEE		-5V/10mA	
TTL Control Voltage		Low=0V, 0 to 0.4V High=+3.3V, +3 to +5V	
Spec Temp		25C	



### Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Control Port	J30J-9ZKSP
Case Material	Copper
Finish	Gold Plated
Weight	50g
Size:	See outline



### Absolute Maximum Ratings Table

Parameter	Value
VEE	-6V
Control Low	0 to 0.4V
Control High	+3 to +6V
RF Power	+23dBm
Operating Temperature	-40 to +85C
Storage Temperature	-65 to +150C

### Notes:

1. Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
2. This data is only for reference, not for guaranteed specifications.
3. Please contact AT Microwave team to make sure you have the most current data.



### True Table

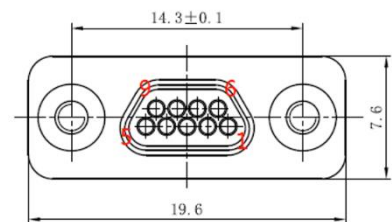
State	P1	P2	P3	P4	P5	P6
Reference	0	0	0	0	0	0
5.625	1	0	0	0	0	0
11.25	0	1	0	0	0	0
22.5	0	0	1	0	0	0
45	0	0	0	1	0	0
90	0	0	0	0	1	0
180	0	0	0	0	0	1

TTL Low=0 to 0.4V

TTL High=+3.3V, +3 to +5V

### Pin Description:

Pin Number	Function	Description
1	P1	TTL
2	P2	TTL
3	P3	TTL
4	P4	TTL
5	P5	TTL
6	P6	TTL
7	VEE	Power supply, -5V
8	GND	
9	NC	



## Dimension (mm)

