

## 0.95-2GHz 360Degree Analog Phase Shifter



### Description:

The AT-APS-0102-360 is an Analog Phase Shifter which is controlled via an analog control voltage from 0 to +14V.

It provides a continuous variable phase shift of 0 to 360 degrees from 0.95GHz to 2GHz with consistent insertion loss versus phase shift. The phase shift is monotonic with respect to control voltage.

For more information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

### Feature

- ✓ Wide Band Operation 0.95-2GHz
- ✓ 360 degree Phase Shift
- ✓ Low Insertion Loss
- ✓ Single Control Operation
- ✓ Customized Available

### Application

- ✓ Point to Point Radios
- ✓ VSAT Radios
- ✓ Test Equipment
- ✓ Fiber Optic
- ✓ Military and Space

### Electronical Specifications:

Parameter	Min	Typical	Max	Unit
Frequency Range		0.95-2		GHz
Phase Range	360	390		Degree
Insertion Loss		-6		dB
Return Loss		-10		dB
Control Voltage		0-14		V
Control Current		1		uA
Sensitivity		28		Deg/V
Response Time		250		ns
Temperature Sensitivity		0.12		Degree/C
Spec Temp		25C		





# AT-APS-0102-360

Analog Phase Shifter, 0.95-2GHz, 360 degree

## Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	SMA Female
Case Material	Copper
Finish	Gold Plated
Package Sealing	Epoxy Sealed
Weight	80g
Size:	See outline

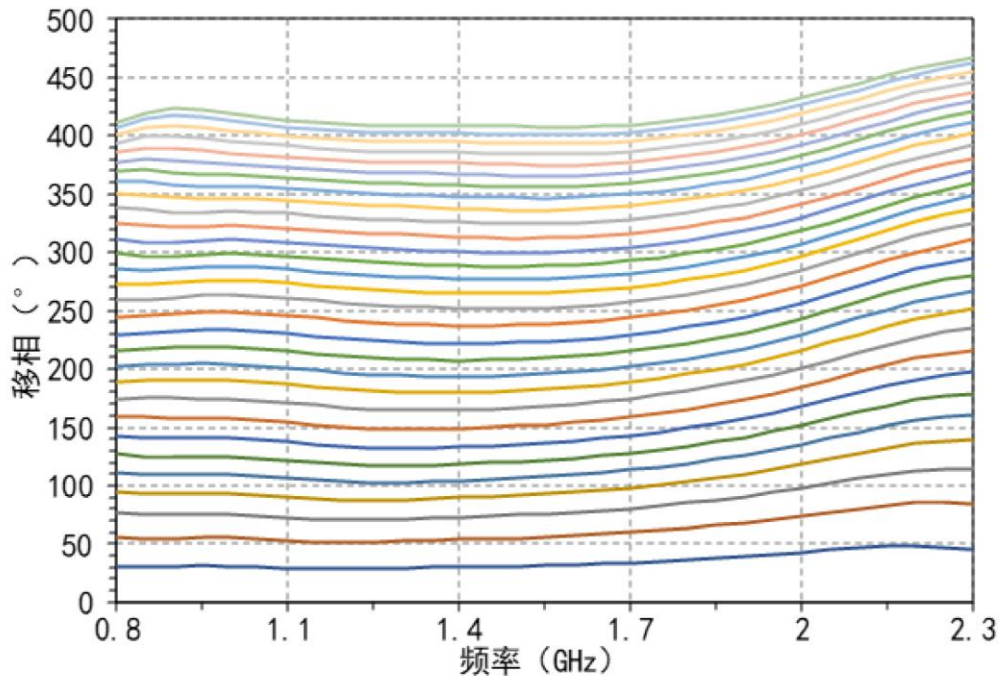
## Absolute Maximum Ratings Table

Parameter	Value
Control Voltage	-0.5 to +18V
RF Input Power	+15dBm
Operating Temperature	-40 to +85C
Storage Temperature	-55 to +125C
ESD Sensitive(HBM)	Class 1A

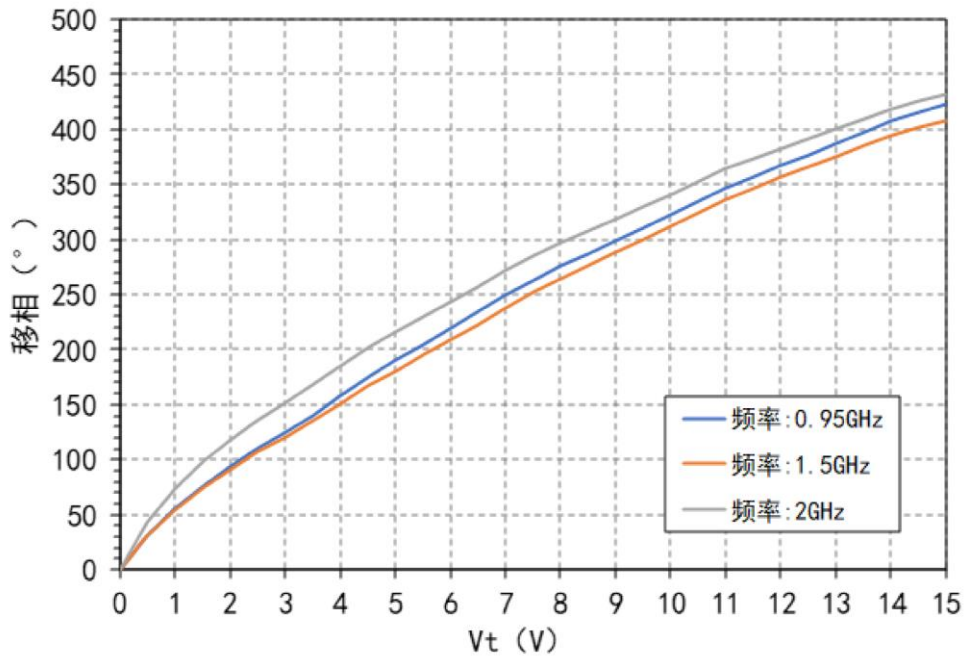
### Notes:

- ✓ Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
- ✓ This data is only for reference, not for guaranteed specifications.
- ✓ Please contact AT Microwave team to make sure you have the most current data.
- ✓ Always pay attention to the temperature of the case, heatsink and fan are required if case temperature exceeds over 50C.



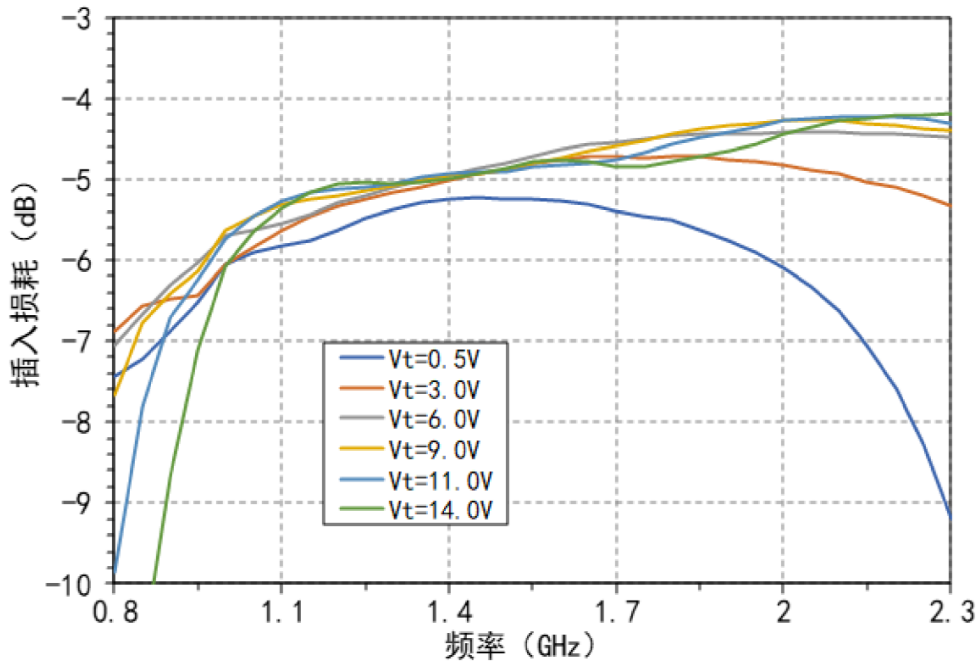


Phase shift vs Frequency from 0.5 to 15V

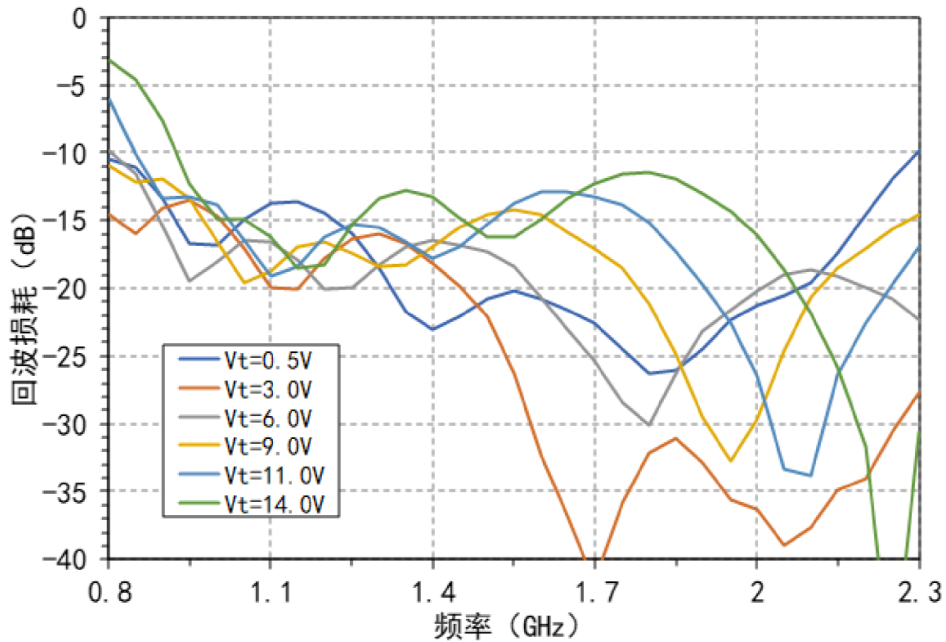


Phase shift vs  $V_t$  from 0.95-2GHz



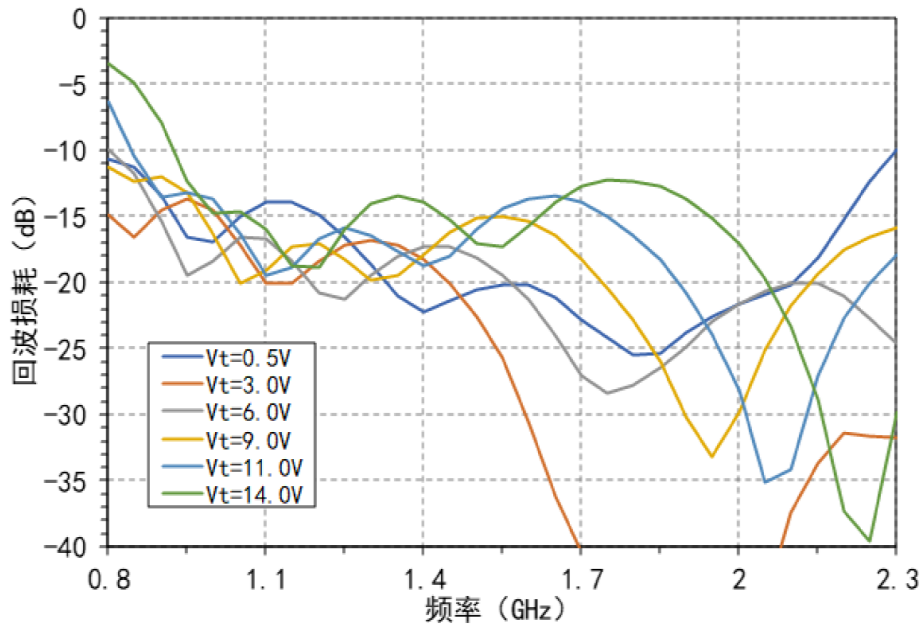


Insertion Loss vs Frequency from 0.5-14V



Input Return Loss vs Frequency from 0.5-14V

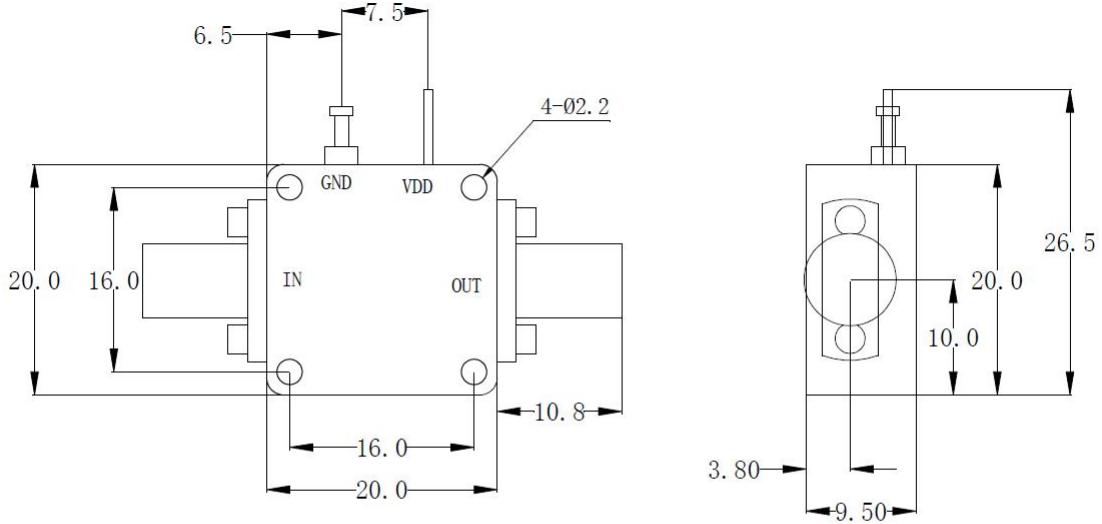




Output Return Loss vs Frequency from 0.5-14V



### Dimension: (unit in mm)



	<26.5GHz	<40GHz	<50GHz	<67GHz
Connector	SMA	2.92mm	2.4mm	1.85mm
Lenth of a	9.4mm	9.5mm	10.8mm	11.3mm

Note: Female Default. Contact with us for other types.

