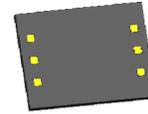


Fixed Phaser Shifter

- ◆ 4GHz to 14GHz
- ◆ Input Power:10W
- ◆ Insertion Loss: 0.2dB
- ◆ Size:1.7mm×1.3mm×0.1mm



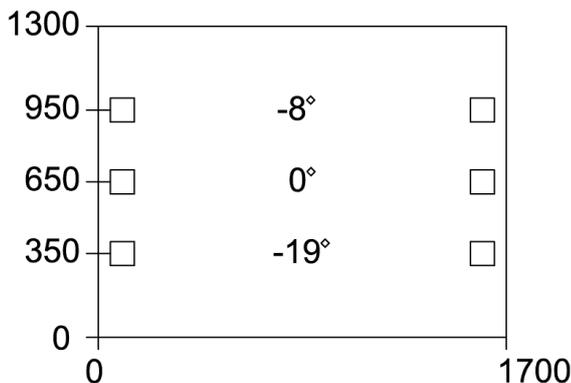
Features

- Adopting advance GaAs technology
- Low VSWR
- Low Insertion Loss
- Die Package

Specification

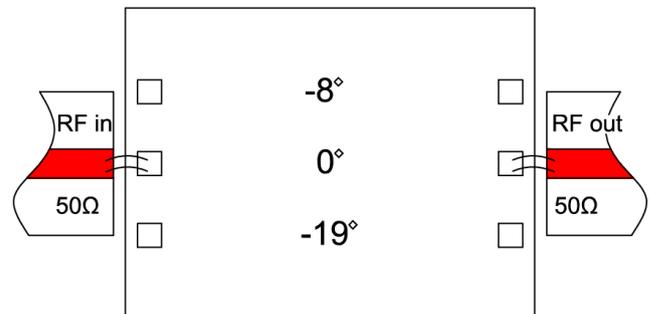
Freq. Range:	4GHz to 14GHz
Input Power:	10W
Insertion Loss:	0.2dB
Input/Output VSWR:	1.2/1.2
Operating Temperature.:	-55 °C to +125 °C
Impedence:	50 Ohm

Outline Dimension



Parameter	Value (μ m)
Thickness	100
Width	1300
Length	1700
Eletrode Size	100x100

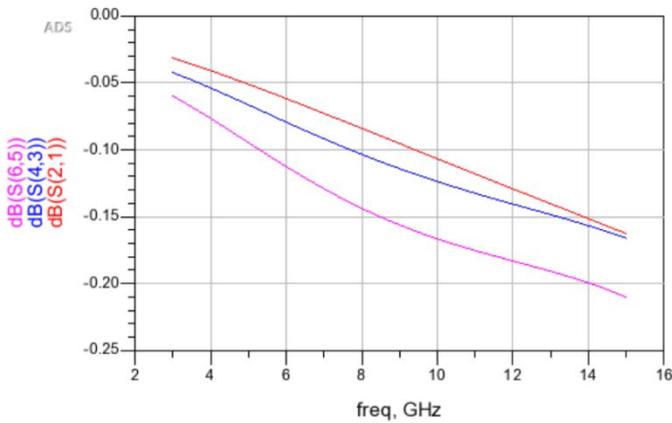
Recommended Assembly Drawing



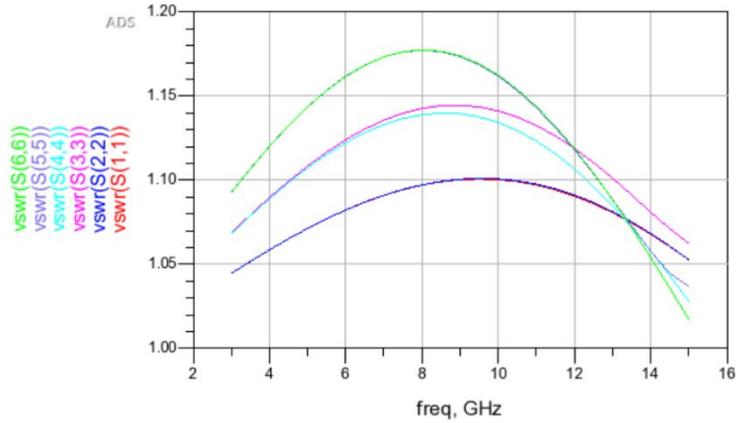
Note: relative phase of each circuit = absolute phase of each circuit - absolute phase of the middle branch, eg at 6GHz, From top to bottom, the absolute phase is roughly -43 °, -35°、-54°,then the corresponding relative phase is -8°、0°、-19°.Also can refer to branch, the corresponding relative phase is 0°、8°、-11°

Test Curve (Die on the prode platform)

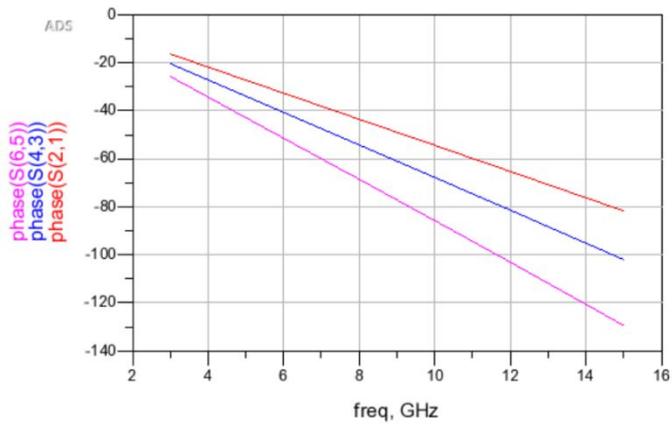
Insertion Loss vs. Frequency



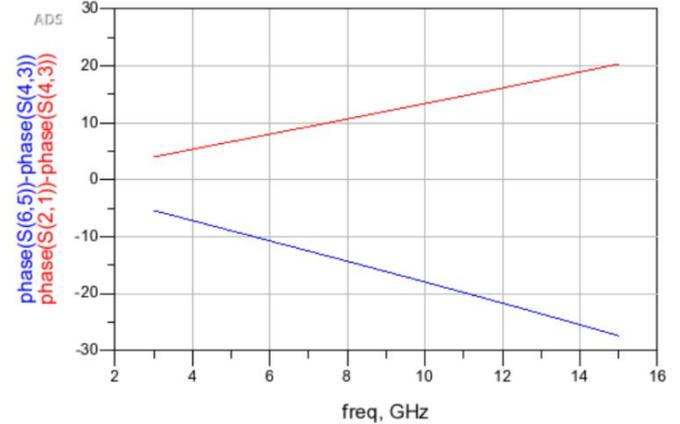
In/output VSWR vs. Frequency



Absolute Phase vs. Frequency



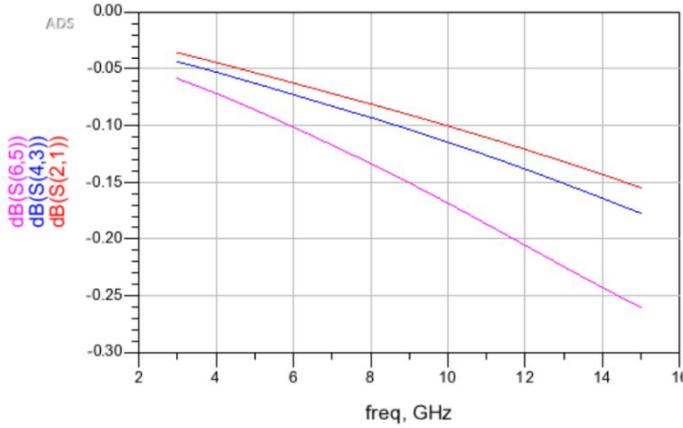
Relative Phase vs. Frequency



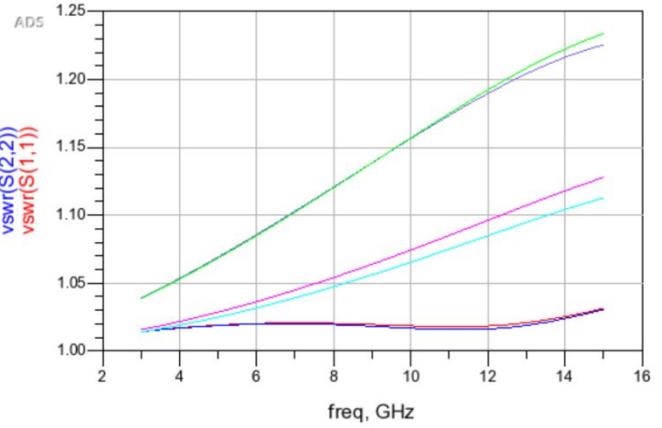
freq	phase(S(2,1))-phase(S(4,3))	phase(S(6,5))-phase(S(4,3))
3.000 GHz	4.012	-5.383
3.500 GHz	4.680	-6.276
4.000 GHz	5.348	-7.169
4.500 GHz	6.015	-8.061
5.000 GHz	6.682	-8.952
5.500 GHz	7.348	-9.843
6.000 GHz	8.014	-10.735
6.500 GHz	8.680	-11.627
7.000 GHz	9.347	-12.521
7.500 GHz	10.015	-13.418
8.000 GHz	10.683	-14.317
8.500 GHz	11.353	-15.219
9.000 GHz	12.026	-16.125
9.500 GHz	12.700	-17.036
10.000 GHz	13.377	-17.951
10.500 GHz	14.057	-18.872
11.000 GHz	14.739	-19.797
11.500 GHz	15.425	-20.728
12.000 GHz	16.115	-21.664
12.500 GHz	16.808	-22.606
13.000 GHz	17.504	-23.553
13.500 GHz	18.204	-24.505
14.000 GHz	18.908	-25.462
14.500 GHz	19.615	-26.424
15.000 GHz	20.325	-27.389

Test curve (add 200um double wire-bonding)

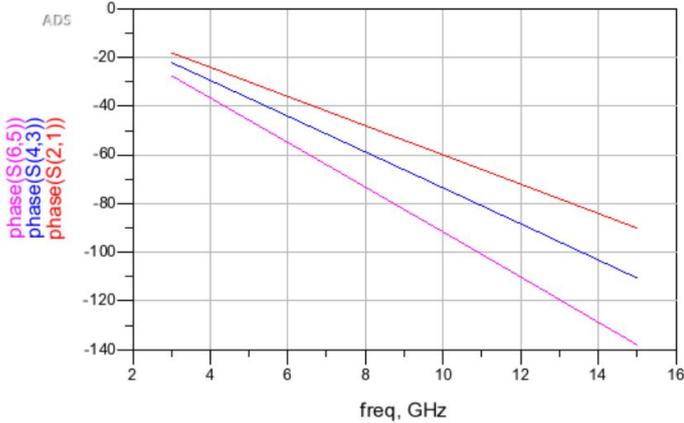
Insertion Loss vs. Frequency



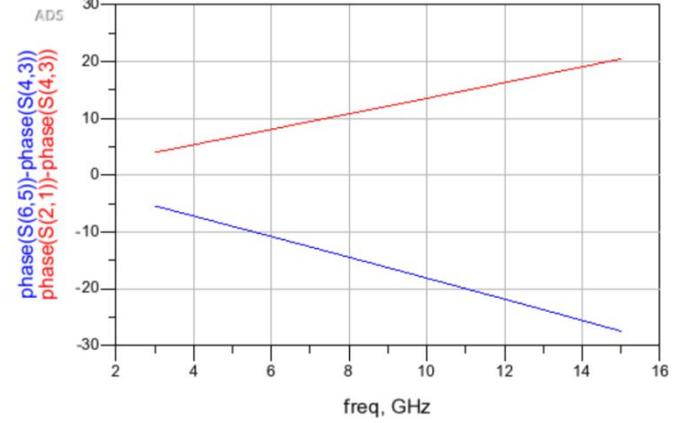
In/output VSWR vs. Frequency



Absolute Phase vs. Frequency



Relative Phase vs. Frequency



freq	phase(S(2,1))-phase(S(4,3))	phase(S(6,5))-phase(S(4,3))
3.000 GHz	4.019	-5.393
3.500 GHz	4.692	-6.293
4.000 GHz	5.365	-7.193
4.500 GHz	6.040	-8.094
5.000 GHz	6.715	-8.997
5.500 GHz	7.391	-9.900
6.000 GHz	8.068	-10.805
6.500 GHz	8.746	-11.712
7.000 GHz	9.426	-12.621
7.500 GHz	10.107	-13.532
8.000 GHz	10.789	-14.445
8.500 GHz	11.474	-15.360
9.000 GHz	12.159	-16.277
9.500 GHz	12.846	-17.196
10.000 GHz	13.535	-18.118
10.500 GHz	14.224	-19.041
11.000 GHz	14.915	-19.967
11.500 GHz	15.606	-20.895
12.000 GHz	16.299	-21.824
12.500 GHz	16.992	-22.756
13.000 GHz	17.685	-23.691
13.500 GHz	18.378	-24.628
14.000 GHz	19.072	-25.567
14.500 GHz	19.766	-26.510
15.000 GHz	20.460	-27.457