



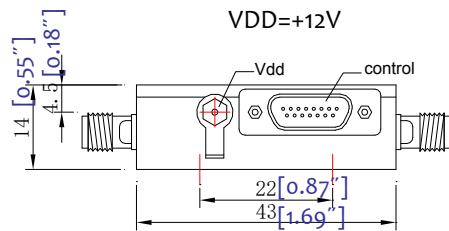
0.8-2.1GHz Digital 6 Bits 360° Step Phase Shifter



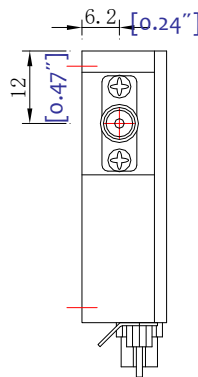
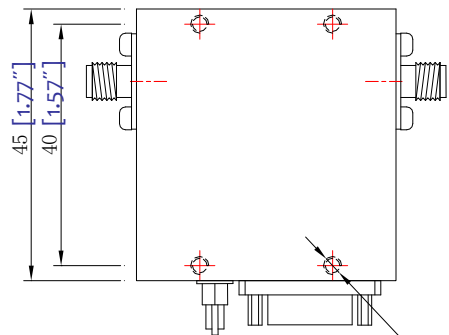
Features

- Wide Band Operation with full 0.8-2.1GHz bandwidth.
- High linearity up to 5W upon request.
- TTL compatible driver include
- Fast Switching Speed
- Flat phase shifting response, low phase error.
- Low Insertion Loss and High Isolation
- Temperature Range -40°C~+85°C
- Customization available upon request

360° Digital Phase Shifter 4/5/6 bits (Wide Band Absorptive)							
Frequency (GHz)	Bandwidth	Insertion Loss (dB)	VSWR	Opt Power	Step	Phase Range	Phase Slope
0.8-2.1GHz	FULL	4dB typ. 6dB max.	2.00	10dBm	5.625°	360°	±5.6°



State	Voltage
Low(0)	0 to +0.5V
High(1)	+3 to +5V(Note 5)



Inverse 4-M3 Depth is 5
[4-M0.118\"/>

Absolute Maximum Ratings

Operating Temperature	20° C to 70° C
Storage Temperature	-55° C to 100° C
(Vdd) Max!	15V
(Vc)	5.0 V
Input Power (RFI N) Max!	15 dBm



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The power beyond expectations

RFPSHT0821N6

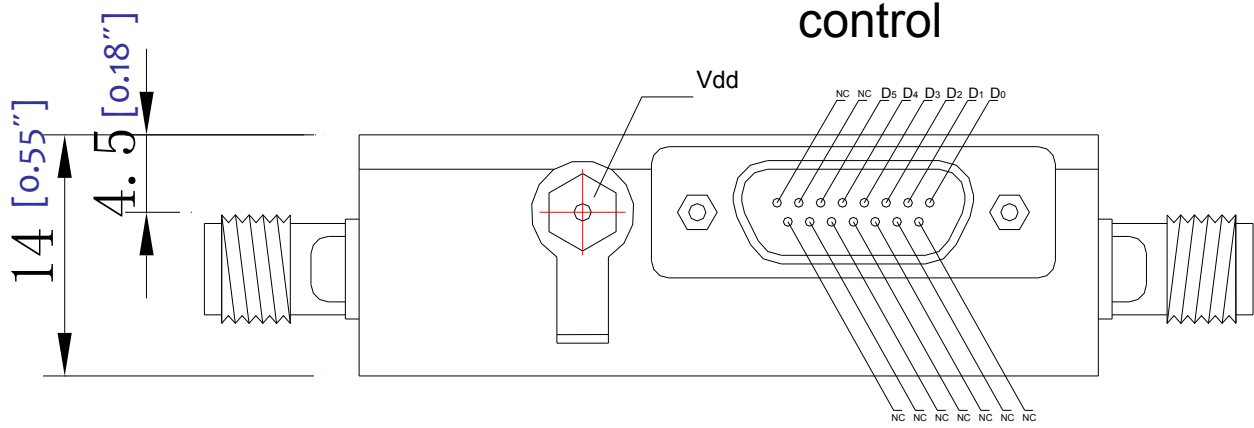
phase	P1.5	P1.4	P1.3	P1.2	P1.1	P1.0	0.8G	1GHz	1.25GHz	1.5GHz	1.75GHz	2G	2.1GHz
Reference	1	1	1	1	1	1	-174.8	45.8	-100.7	136.6	27.2	-81.1	-143.3
5.625	1	1	1	1	1	0	-165.7	54.2	-91.8	145.5	36	-70.2	-131.6
11.25	1	1	1	1	0	1	-160.7	59.4	-86.4	150.8	41.2	-63.8	-124.4
16.9	1	1	1	1	0	0	-154.8	64.6	-81	156.1	46.4	-57.4	-117.6
22.5	1	1	1	0	1	1	-149.1	70.6	-74.9	162	52.2	-50.5	-110.2
28.1	1	1	1	0	1	0	-142.5	77	-68.3	168.4	58.7	-43.1	-102
33.7	1	1	1	0	0	1	-137.6	82.6	-62.8	173.7	64	-37.2	-95.7
39.4	1	1	1	0	0	0	-131.9	88.7	-56.6	179.6	70	-30.5	-88.6
45	1	1	0	1	1	1	-125.5	95.5	-49.9	173.9	76.4	-23.4	-80.7
50.6	1	1	0	1	1	0	-119.7	102	-43.7	-167.8	82.5	-16.8	-73.6
56.2	1	1	0	1	0	1	-114.3	108.4	-37.4	-161.9	88.5	-10.4	-67
61.9	1	1	0	1	0	0	-109.1	114.4	-31.7	-156.4	94.1	-4.5	-60.6
67.5	1	1	0	0	1	1	-103.9	120.2	-26.2	-151.1	98.5	1.1	-54.4
73.1	1	1	0	0	1	0	-99.2	125.8	-20.9	-145.9	104.7	6.5	-48.6
78.7	1	1	0	0	0	1	-94	131.6	-15.4	-140.6	110.2	12.1	-42.3
84.4	1	1	0	0	0	0	-87.9	138.9	-8.5	-133.9	116.9	18.9	-34.9
90	1	0	1	1	1	1	-83	144.4	-3.1	-128.7	122.1	24.2	-29.1
95.6	1	0	1	1	1	0	-77.9	150.4	2.5	-123.1	127.7	29.9	-23.3
101.2	1	0	1	1	0	1	-72.3	156.8	7.7	-116.9	133.8	36.1	-16.7
106.8	1	0	1	1	0	0	-66.2	163.7	15.4	-110.4	140.3	42.6	-9.8
112.5	1	0	1	0	1	1	-61	169.8	21.4	-104.5	146.2	48.4	-3.8
118.1	1	0	1	0	1	0	-56.7	174.6	26.2	-99.8	150.8	53.1	1
123.7	1	0	1	0	0	1	-50.8	-179	32.5	-93.5	157	59.1	7.4
129.3	1	0	1	0	0	0	-46.4	-174.1	37.5	-88.7	161.8	63.9	12.2
135	1	0	0	1	1	1	-41.7	-169.1	42.7	-83.6	166.7	68.7	17.2
140.6	1	0	0	1	1	0	-36.5	-163.6	48.2	-78.1	172.1	74	22.7
146.2	1	0	0	1	0	1	-31.7	-158.5	53.6	-72.8	177.2	79	27.8
151.8	1	0	0	1	0	0	-26.1	-152.8	59.6	-67	-177.1	84.5	33.5
157.5	1	0	0	0	1	1	-21	-147.8	64.8	-61.7	-171.9	89.4	38.6
163.1	1	0	0	0	1	0	-15.4	-142.4	70.6	-56.1	-166.5	94.7	44.1
168.7	1	0	0	0	0	1	-9.5	-136.5	76.9	-50	-160.5	100.5	49.9
174.3	1	0	0	0	0	0	-4	-131.3	82.5	-44.4	-155.2	105.7	55.1
180	0	1	1	1	1	1	1.8	-125.7	88.5	-38.5	-149.4	111.1	60.7
185.6	0	1	1	1	1	0	7.3	-120.5	94	-33.1	-144.1	116.2	65.3
191.2	0	1	1	1	0	1	13	-115.1	99.8	-27.3	-138.5	121.5	70.9
196.9	0	1	1	1	0	0	18.5	-110.1	105.2	-21.8	-133.3	126.5	75.8
202.5	0	1	1	0	1	1	24.5	-104.3	111.4	-15.7	-127.2	132.3	81.8
208.1	0	1	1	0	1	0	30.3	-99	117.1	-10	-121.8	137.4	86.1
213.7	0	1	1	0	0	1	36.1	-93.7	122.7	-4.4	-116.3	142.5	90.2
219.4	0	1	1	0	0	0	42.3	-87.9	128.8	1.7	-110.3	148.3	96.5
225	0	1	0	1	1	1	48.1	-82.8	134.2	7.2	-105	153.4	101.2
230.6	0	1	0	1	1	0	53.7	-77.6	139.6	12.7	-99.7	158.4	106.1
236.2	0	1	0	1	0	1	59.9	-72.1	145.3	18.5	-94	163.9	111.2
241.9	0	1	0	1	0	0	65.4	-67.1	150.5	23.8	-88.8	168.8	115.9
247.5	0	1	0	0	1	1	70.8	-62.1	155.6	29	-83.7	173.8	120.4
253.1	0	1	0	0	1	0	76.8	-56.8	161.1	34.7	-78.2	179.1	125.4
258.7	0	1	0	0	0	1	82.7	-51.5	166.5	40.1	-72.8	175.5	130.3
264.7	0	1	0	0	0	0	88.5	-46.2	171.8	45.7	-67.4	170.2	135.2
270	0	0	1	1	1	1	94.3	-41	177	51	-62.2	-165	140.1
275.6	0	0	1	1	1	0	100.1	-35.9	-177.7	56.4	-56.9	-159.7	145
281.2	0	0	1	1	0	1	106.4	-30	-170.2	62.3	-51.1	-153.8	150.3
286.9	0	0	1	1	0	0	112.8	-24.1	-166.2	68.3	-45.2	-148	155.8
292.5	0	0	1	0	1	1	119.2	-18.4	-160.5	74.1	-39.5	-142.2	161.3
298.1	0	0	1	0	1	0	125.6	-12.5	-154.9	79.8	-33.8	-136.4	166.8
303.7	0	0	1	0	0	1	131.9	-7	-149.5	85.4	-28.4	-130.8	172.2
309.4	0	0	1	0	0	0	138.4	-1.2	-144.1	91	-22.8	-125.1	177.7
315	0	0	0	1	1	1	145	4.3	-138.7	96.5	-17.4	-119.6	-176.8
320.6	0	0	0	1	1	0	152.2	10.4	-133.1	102.2	-11.6	-113.8	-171.1
326.2	0	0	0	1	0	1	159.5	16.4	-127.5	107.9	-5.9	-108	-165.4
331.9	0	0	0	1	0	0	167.4	22.7	-121.8	113.7	0	-102.1	-159.4
337.5	0	0	0	0	1	1	175.5	28.9	-116.2	119.4	5.6	-96.4	-153.6
343.1	0	0	0	0	1	0	-175.6	35.1	-110.7	125	11.3	-90.7	-147.8
348.7	0	0	0	0	0	1	-166	41.6	-105	130.7	17.2	-85	-141.8
354-375	0	0	0	0	0	0	-156.2	48.3	-99.1	136.6	23.2	-79.2	-136

0.8-2.1GHz Full Band Digital Step 360° 6 Bits Phase Shifter



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The power beyond expectations



Control Voltage Input						Phase Shift (Degrees) RFIN - RFout
D5	D4	D3	D2	D1	D0	
1	1	1	1	1	1	Reference*
1	1	1	1	1	0	5.625
1	1	1	1	0	1	11.25
1	1	1	0	1	1	22.5
1	1	0	1	1	1	45.0
1	0	1	1	1	1	90.0
0	1	1	1	1	1	180.0
0	0	0	0	0	0	354.375

