



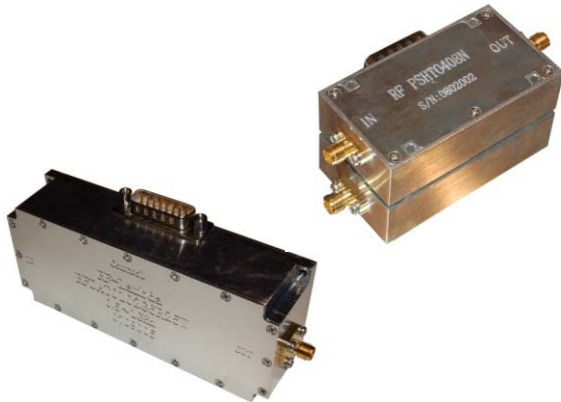
RF-LAMBDA

The power beyond expectations

4 Bits Digital Phase shifter

Applications:

- Flat phase variation cross frequency.
- Low phase error, low insertion loss.
- A balanced micro-stripe keeps low VSWR and amplitude in-balance.
- High power unit is available upon request.
- Standard unit operate with 4 Bits.



Dispersive Phase Shifters

1. TTL Driver, 4 Bits
2. Insertion loss was tested under “00000” status.
3. Accuracy: $\pm 2^\circ$
4. Temperature Drift: $\pm 3\%$
5. Octave Bandwidth
6. Parasitical amplitude modulation: $\pm 0.2\text{dB}$
7. Operating Temperature:
 - 40°C~+70°C commercial standard
 - 55°C~+85°C Mil standard
 - 55°C~+100°C Aerospace standard

Narrow Band Reflective Phase Shifter

Part Number	Freq. (GHz)	Bandwidth (%)	Step ($^\circ$)	($^\circ$) Phase Accuracy	TTL Control	Insertion Loss (dB)	IL Ripple (dB)	VSWR (max.)	Phase Range ($^\circ$)	Average Power (Watts)
RFPSHT0001D4	0.01-1	20%	22.50	± 3.0	4 bits	1.00	0.40	1.30	337.50	0.2
RFPSHT0102D4	1-2	15%	22.50	± 3.0	4 bits	1.20	0.40	1.35	337.50	0.2
RFPSHT0204D4	2-4	15%	22.50	± 3.0	4 bits	2.00	0.50	1.40	337.50	0.2
RFPSHT0408D4	4-8	10%	22.50	± 4.0	4 bits	3.00	0.60	1.50	337.50	0.2
RFPSHT0812D4	8-12	10%	22.50	± 5.0	4 bits	4.00	0.80	1.80	337.50	0.2
RFPSHT1218D4	12-18	10%	22.50	± 6.0	4 bits	6.50	1.00	2.00	337.50	0.2

Wide Band Absorptive Phase Shifter

Part Number	Freq. (GHz)	Bandwidth (%)	Step ($^\circ$)	($^\circ$) Phase Accuracy	TTL Control	Insertion Loss (dB)	IL Ripple (dB)	VSWR (max.)	Phase Range ($^\circ$)	Average Power (Watts)
RFPSHT0001N4	0.01-1	20%	22.50	± 5.6	4 bits	3.00	0.40	2.00	337.50	0.2
RFPSHT0102N4	1-2	Full	22.50	± 5.6	4 bits	3.00	0.40	2.00	337.50	0.2
RFPSHT0204N4	2-4	Full	22.50	± 5.6	4 bits	3.00	0.50	2.00	337.50	0.2
RFPSHT0408N4	4-8	Full	22.50	± 10	4 bits	5.00	0.60	2.00	337.50	0.2
RFPSHT0812N4	8-12	Full	22.50	± 10	4 bits	5.00	0.80	2.00	337.50	0.2
RFPSHT1218N4	12-18	Full	22.50	± 10	4 bits	8.00	1.00	3.00	337.50	0.2

4 Bits DIGITAL PHASE SHIFTER (ABSORPTIVE / REFLECTIVE)



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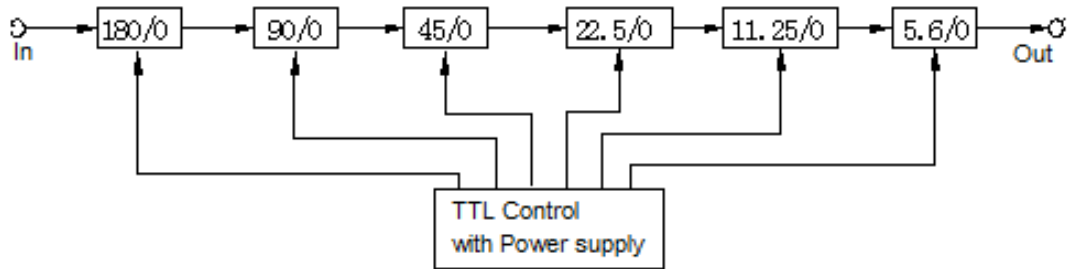


Figure 1. Phase Shifter structure

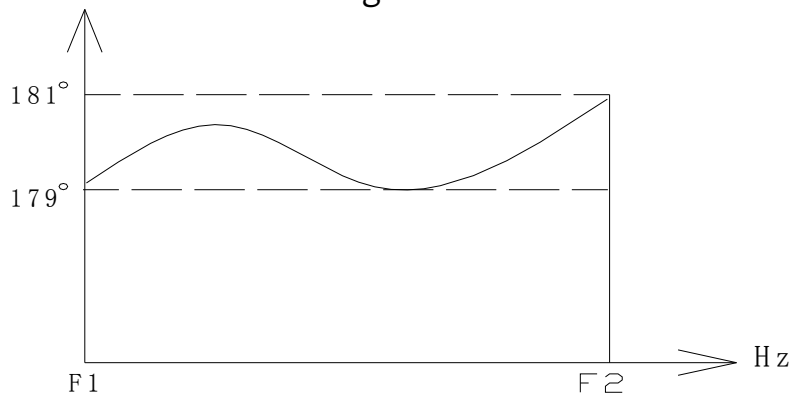
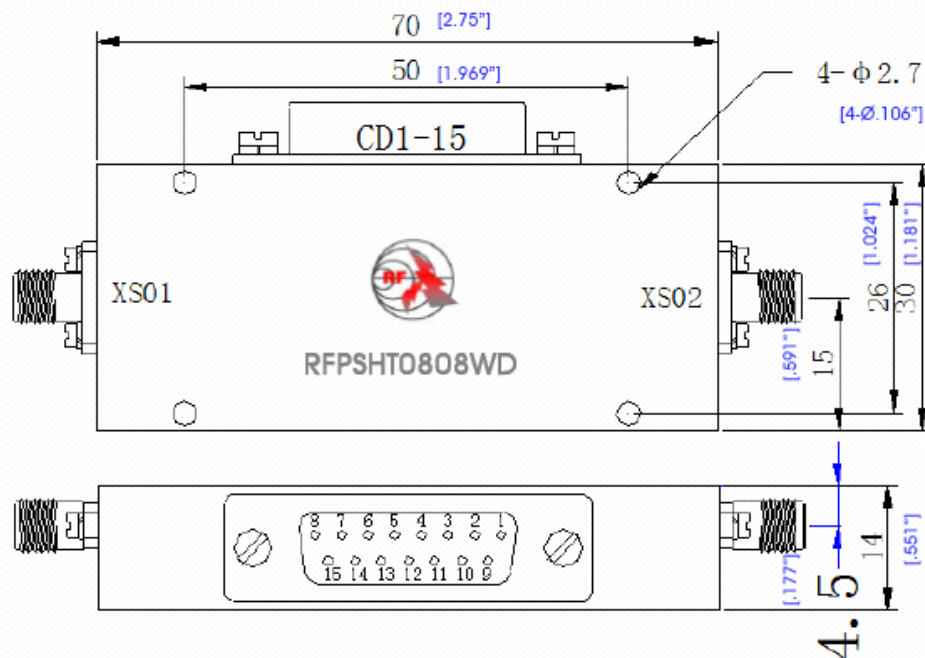


Figure 2. Non-Dispersive Phase Shifter Sample plot.

Package A



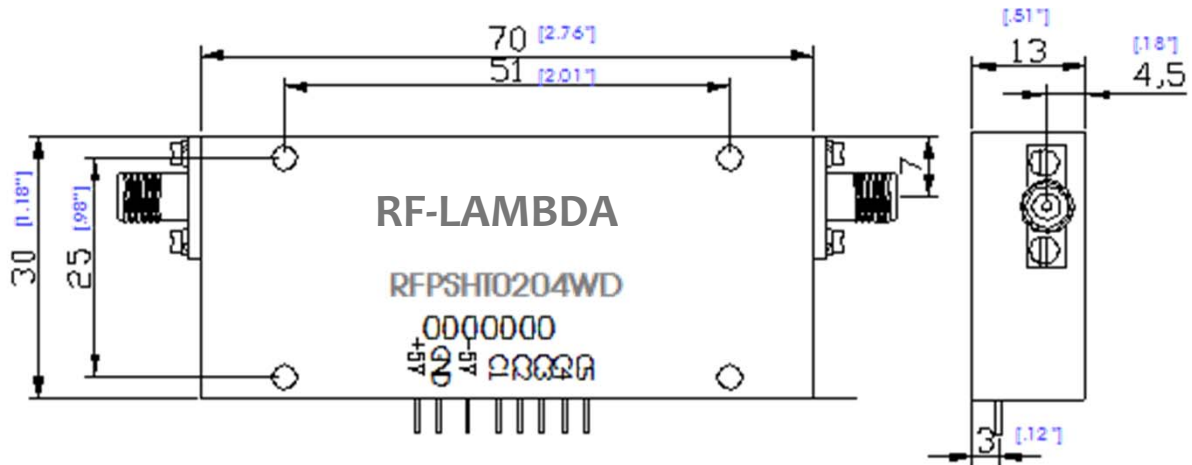
4 Bits DIGITAL PHASE SHIFTER (ABSORPTIVE / REFLECTIVE)



RF-LAMBDA

The power beyond expectations

Package B



4 Bits DIGITAL PHASE SHIFTER (ABSORPTIVE / REFLECTIVE)