



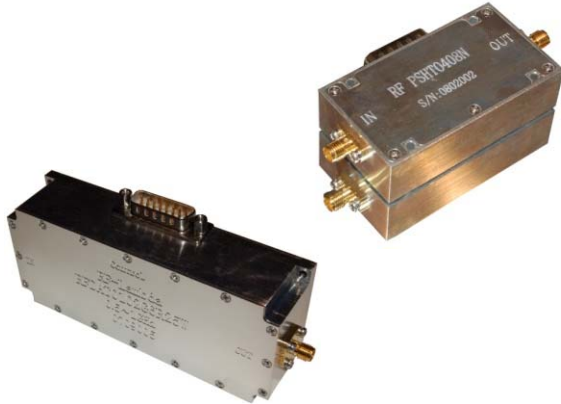
# RF-LAMBDA

The power beyond expectations

## 5 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 5 bits.



### Dispersive Phase Shifters

1. TTL Driver, 5 Bits
2. Insertion loss was tested under "0000" 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 (°)	(°) Phase Accuracy	TTL Control	Insertion Loss (dB)	IL Ripple (dB)	VSWR (max.)	Phase Range (°)	Average Power (Watts)
RFPSHT0001D5	0.01-1	20%	11.25	$\pm 3.0$	5 bits	12.00	0.45	1.80	348.75	0.2
RFPSHT0102D5	1-2	15%	11.25	$\pm 3.0$	5 bits	1.60	0.45	1.35	348.75	0.2
RFPSHT0204D5	2-4	15%	11.25	$\pm 3.0$	5 bits	2.80	0.55	1.40	348.75	0.2
RFPSHT0408D5	4-8	13%	11.25	$\pm 4.0$	5 bits	4.50	0.65	1.50	348.75	0.2
RFPSHT0812D5	8-12	12%	11.25	$\pm 5.0$	5 bits	5.50	0.85	1.80	348.75	0.2
RFPSHT1218D5	12-18	10%	11.25	$\pm 6.0$	5 bits	8.50	1.10	2.00	348.75	0.2

### Wide Band Absorptive Phase Shifter

Part Number	Freq. (GHz)	Bandwidth (%)	Step (°)	(°) Phase Accuracy	TTL Control	Insertion Loss (dB)	IL Ripple (dB)	VSWR (max.)	Phase Range (°)	Average Power (Watts)
RFPSHT0001N5	0.01-1	20%	11.25	$\pm 5.6$	5 bits	3.50	0.40	2.00	337.50	0.2
RFPSHT0102N5	1-2	Full	11.25	$\pm 5.6$	5 bits	3.50	0.20	2.00	348.75	0.2
RFPSHT0204N5	2-4	Full	11.25	$\pm 5.6$	5 bits	3.50	0.30	2.00	348.75	0.2
RFPSHT0408N5	4-8	Full	11.25	$\pm 10$	5 bits	5.50	0.40	2.00	348.75	0.2
RFPSHT0812N5	8-12	Full	11.25	$\pm 10$	5 bits	5.50	0.50	2.00	348.75	0.2
RFPSHT1218N5	12-18	Full	11.25	$\pm 10$	5 bits	8.50	1.60	3.00	348.75	0.2

5 Bits DIGITAL PHASE SHIFTER (ABSORPTIVE / REFLECTIVE)



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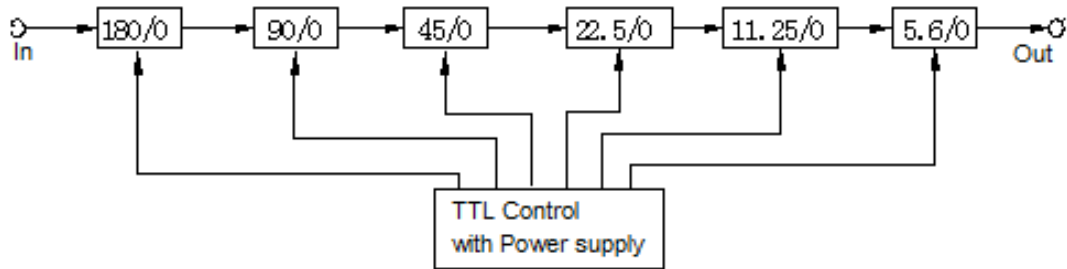


Figure 1. Phase Shifter structure

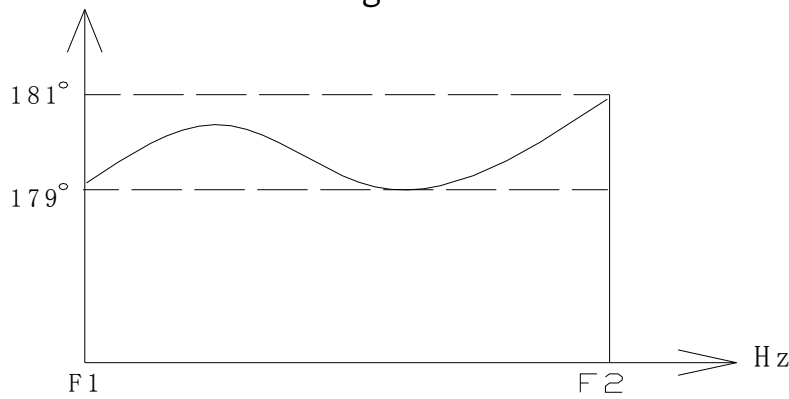
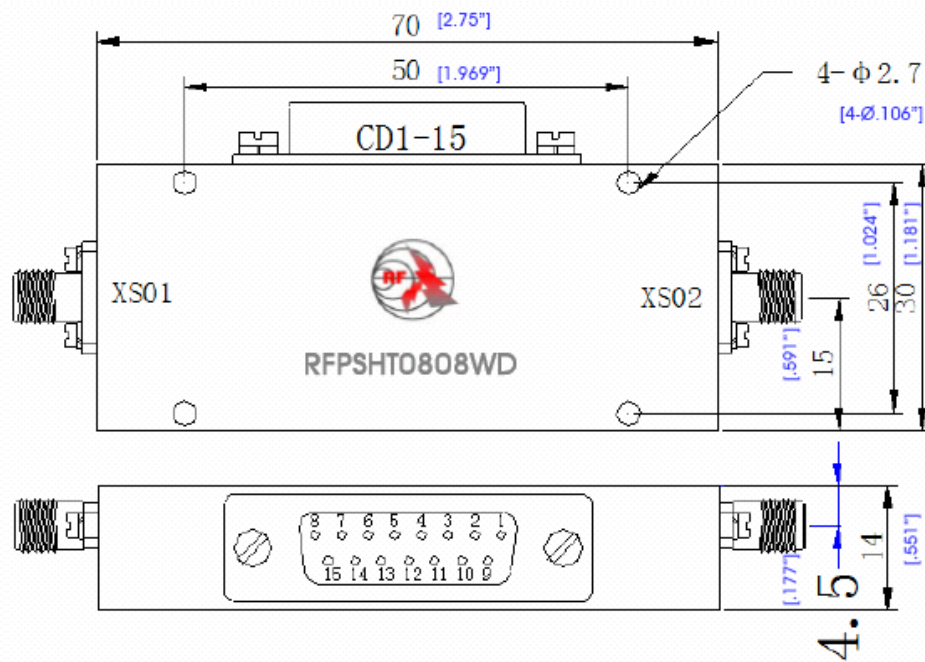


Figure 2. Non-Dispersive Phase Shifter Sample plot.

## Package A



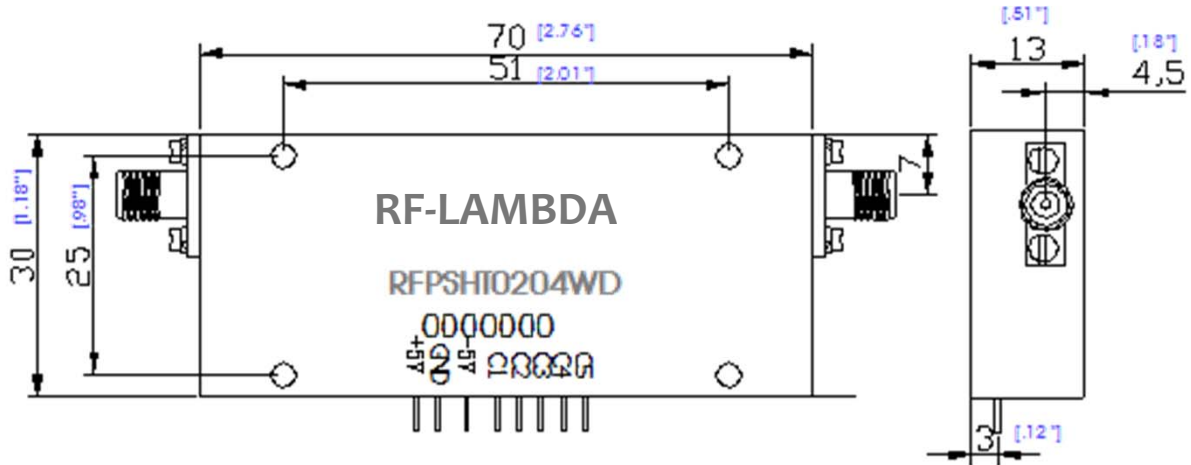
5 Bits DIGITAL PHASE SHIFTER (ABSORPTIVE / REFLECTIVE)



# RF-LAMBDA

The power beyond expectations

## Package B



5 Bits DIGITAL PHASE SHIFTER (ABSORPTIVE / REFLECTIVE)