

## High Power Phase Shifter Tuner DC-4GHz



### Product Description

RFPSHT0004W1 is a high power phase shifter tuner with a frequency range of DC to 4GHz.

The phase shifter's adjustment range 180 degrees. The insertion loss is 0.75dB with a max VSWR of 1.4:1.

Phase shifters are devices used to adjust transmission phase in a system,. RF-Lambda phase shifters provide low insertion loss, and equal amplitude (or loss) in all phase states.

The working temperature of this product is between - 10°C and + 50°C.

### Features

- Manual Phase Shifter
- High Power Handling Capability
- Low Insertion Loss

### Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

### Electrical Specifications (T<sub>A</sub>=+25°C)

Parameter	Min	Typ	Max	Units
Frequency Range		DC - 4		GHz
Insertion Loss			0.75	dB
*Phase Range		180		degrees
VSWR			1.4	:1
Average Power			50	W
Peak Power			2	KW
Weight		0.44		lbs
Connectors		SMA-Female		

\*Phase Adjustment Range specification ONLY refers to the highest frequency point. The total phase adjustment range is proportional to the frequency range. HALF the frequency range means HALF of the phase adjustment range. For example 8GHz range 360deg, then 4GHz will be 180deg total range.

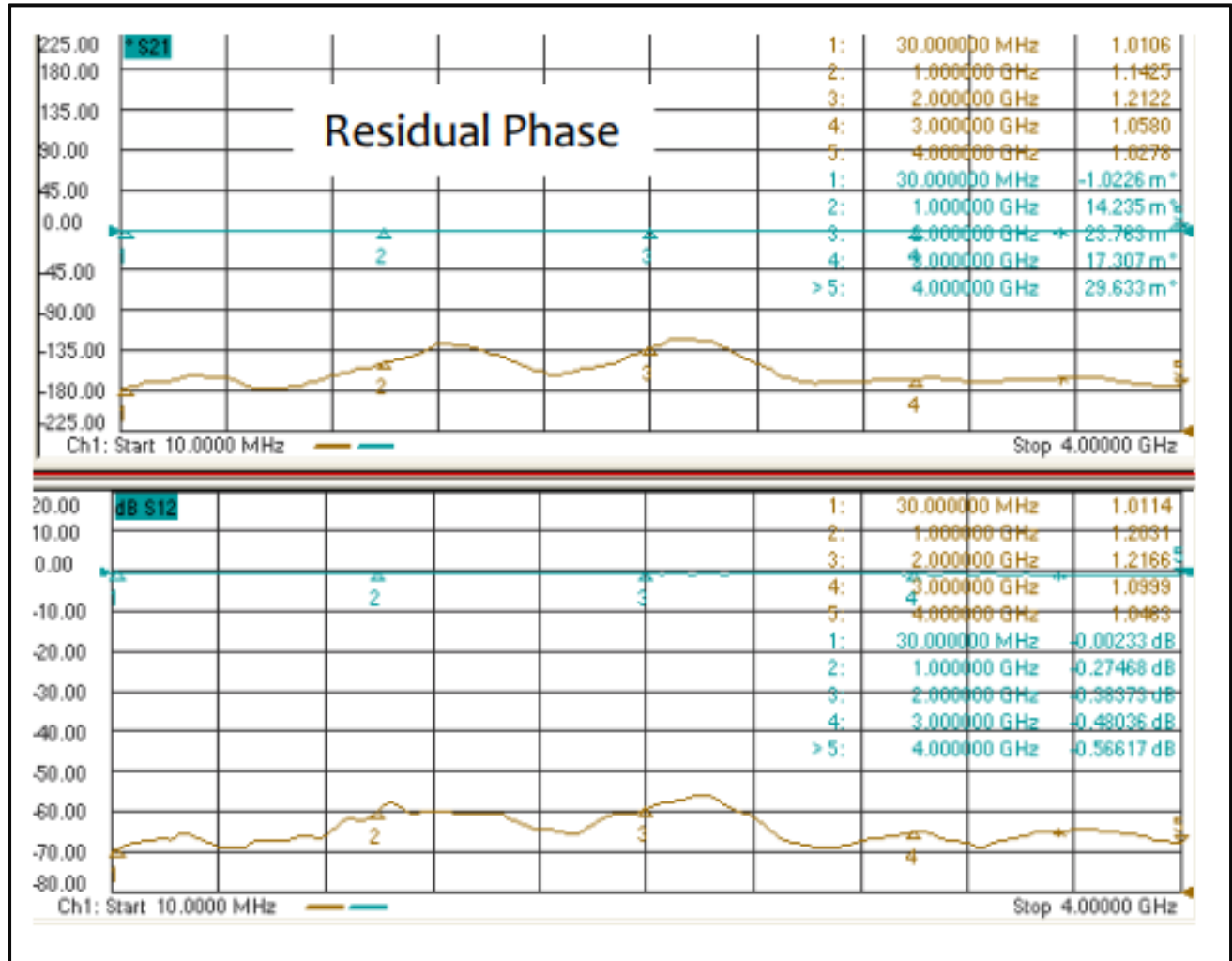
**Environmental Specifications and Test Standards**

Parameter	Description
Operational Temperature	-10°C to +50°C (Case Temperature)
Storage Temperature	-40°C to +70°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +50°C for 72 Hours
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

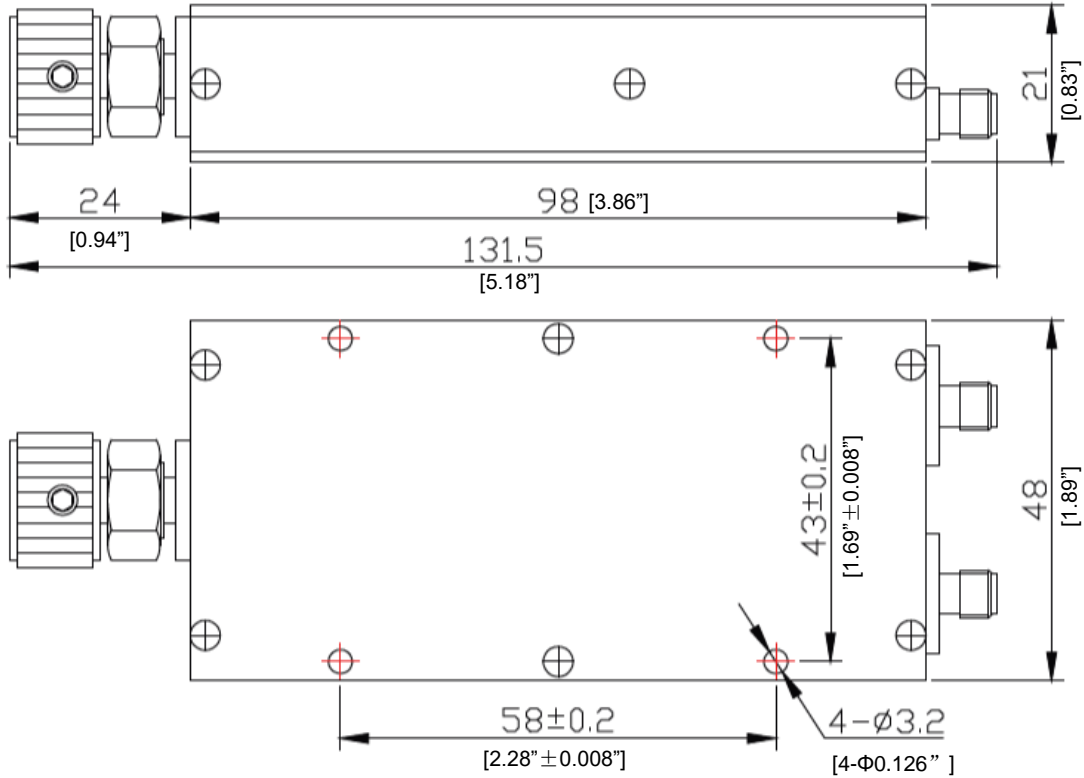
\*\*For vibration testing details please see additional information section.

Typical Performance Plots

Insertion Loss & VSWR & Phase



**Outline Drawing**



Notes:

1. Package Material: Aluminum
2. External Finish: Painted
3. All dimensions are in millimeters [inches].
4. Tolerances  $\pm 0.5$  [0.02], unless otherwise specified.



Additional Information

Documentation	Webpage
ESD Policy	<a href="https://rflambda.com/pdf/rflambda_esd_control.pdf">https://rflambda.com/pdf/rflambda_esd_control.pdf</a>
Connector Torque Specifications	<a href="https://www.rflambda.com/pdf/Torque_Specifications.pdf">https://www.rflambda.com/pdf/Torque_Specifications.pdf</a>
Random Vibration Test Standard	<a href="https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf">https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf</a>

**Ordering Information**

Part Number	Modification	Description
RFPSHT0004W1	Connector SMA-Female	DC-4GHz Manual Phase Shifter

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