Waveguide WR90 Dual Directional Coupler 8.5GHz-9.6GHz

Note: The photo is for illustration purposes only.
Please refer to the outline drawing.

Product Description

RWGDCP90SB is a waveguide dual directional coupler with a frequency range of 8.5 to 9.6GHz.

The power handling for this dual directional coupler is 300W. The maximum Insertion Loss is 0.25dB with a minimum directivity of 15dB.

The working temperature of this product is between - 40℃ and + 85℃.

Features

- Compact Package
- Low Insertion loss
- High power handling capability

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, TA = +25°C

Parameter		Min	Typ	Max	Units
Frequency Range		8.5		9.6	GHz
Directivity		15			dB
Insertion Loss				0.25	dB
VSWR Primary				1.10	:1
VSWR Secondary				1.25	:1
Coupling			40±1.0 (other values Available, please inquire)		dB
Power Handling	Average (CW)		300		W
	Peak		30		KW
Waveguide Type			WR90		
Flange Type			CPRG, CPRF, COVER, CHOKE available		
Flange Holes			Through		

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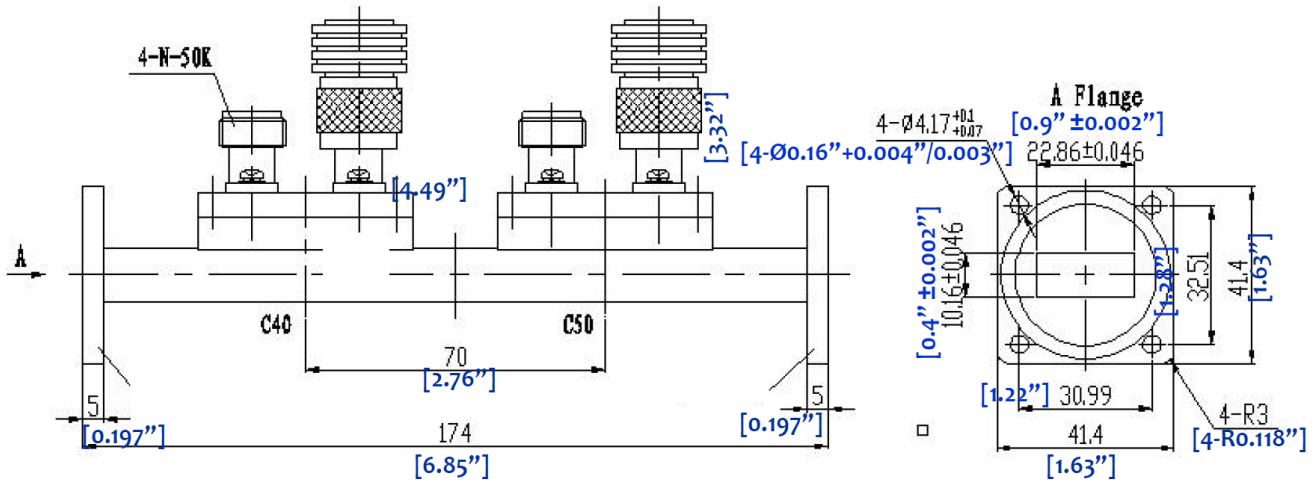
Environmental Specifications and Test Standards

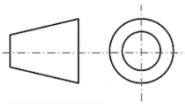
Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-60ºC to +125ºC
Thermal Shock	-40ºC → +85ºC (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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.

Outline Drawing



Notes:
1. Basis-material : Alloyed Cuprum
2. Internal Body Finish: Plated chromate or conversion
3. External Body Finish: Body painted with gray/black epoxy enamel
4. All dimensions are in millimeters [inches].
5. Standard torque wrench must be used to secure RF connectors.



Additional Information

Documentation	Webpage
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RWGDCP90SB	WR90	8.5GHz-9.6GHz Waveguide Dual Directional Coupler

Important Notice

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