0.9–9 GHz Bidirectional RF Coupler, 35 dB Typical Coupling

This coupler samples forward and reverse signals across 0.9–9 GHz. Coupling is 35 dB typical, with insertion loss no greater than 0.3 dB.

Power handling is 250 W, design guaranteed. The port table specifies N-Type main-line and SMA coupled interfaces in an aluminum 6061 housing.



Electrical specifications

Parameter	Value	Unit
Frequency range [1]	0.9–9.0	GHz
Insertion loss	≤0.3	dB
Coupling [2]	33 / 35 / 37	dB
Directivity [3]	10 / 15	dB
Main-line VSWR	≤1.5	-
Coupled-line VSWR	≤1.4	-

[1] Maximum: 9 GHz.

[2] Minimum: 33 dB. Typical: 35 dB. Maximum: 37 dB.

[3] Minimum: 10 dB. Typical: 15 dB.

General specifications

Parameter	Value	Unit
Main-line connector [1]	N-F / K	-
Coupled-port connector [1]	SMA-F / K	-
Impedance	50	Ω
Surface finish	Conductive finish	-
Power handling [2]	250	W
Housing material	Aluminum 6061	-
Operating temperature [3]	−40–+70	°C
Storage temperature [4]	−55–+85	°C

[1] Alternative connector designations stated in the source; delivered option is unconfirmed.

[2] Design guaranteed.

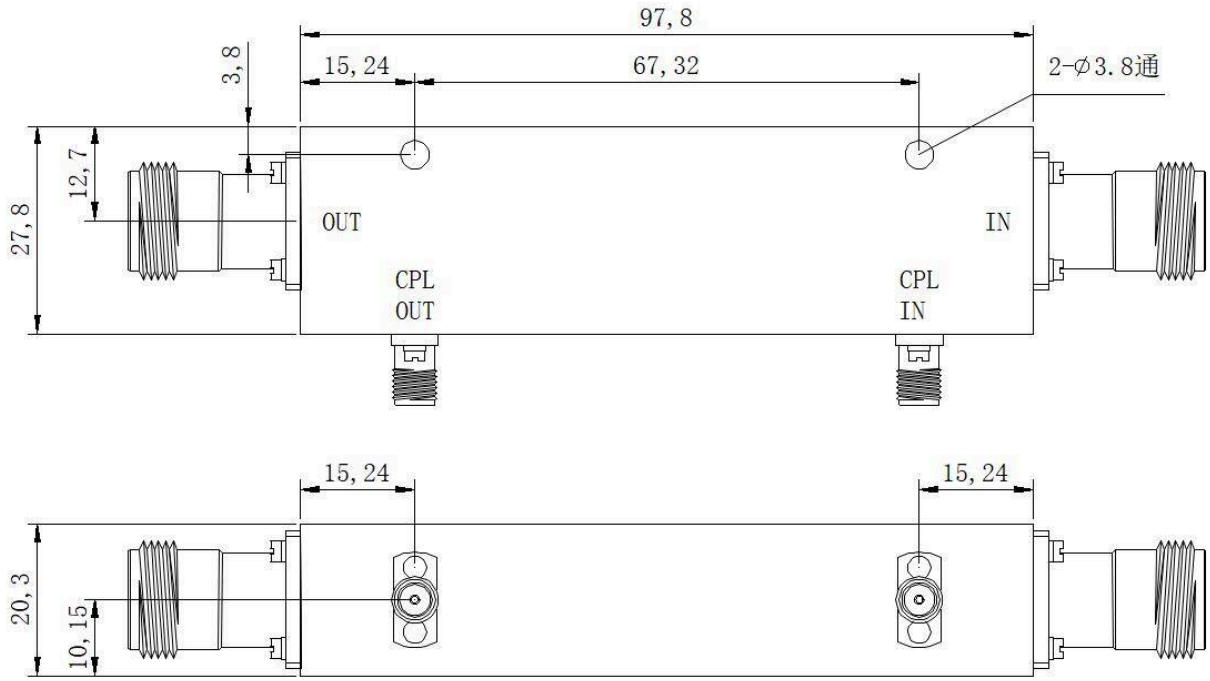
[3] Maximum: 70 °C.

[4] Maximum: 85 °C.

Interfaces and contacts

Interface	Specification
Input connector	N-Type
Output connector	N-Type
Coupled input connector	SMA
Coupled output connector	SMA

Mechanical Outline



Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.