

High Power Single and Dual Directional Couplers



RLC Electronics' high power directional couplers offer accurate coupling, low insertion loss and high directivity in a compact package. The standard units are optimized for 2 octave bandwidths and are available with a choice of coupling values. These units are ideal for sampling forward and reflected power with a negligible effect on the transmission line and very low intermodulation products.

Specifications

CHP-1040⁻¹⁻²⁻³⁻⁴, CHP-2080⁻¹⁻²⁻³⁻⁴
CHP-3012⁻¹⁻²⁻³⁻⁴, CHP-6018⁻¹⁻²⁻³⁻⁴

Model Number	Frequency Range (GHz)	Directivity (Min.)	Primary VSWR (Max.)	Secondary VSWR (Max.)	Insertion Loss (Max.)
CHP-1040	1-4	23dB	1.20	1.30	.15dB
CHP-2080-	2-8	21dB	1.25	1.30	.20dB
CHP-3012	3-12	18dB	1.30	1.30	.25dB
*CHP-6018	6-18	14dB	1.50	1.50	.35dB

Impedance: 50 ohms

Power: 500 watts avg., 10kw peak, *250 watts

Accuracy (including frequency variation): +/- 1.0dB

Coupling (nominal): 30, 40 or 50dB

Connectors: Main line Type "N" (male or female)

Secondary line-"SMA" female

To designate the coupler desired use:

1: S for single, D for dual

2: Forward coupling value 30, 40 or 50dB

3: Reverse coupling value 30, 40 or 50dB (dual only)

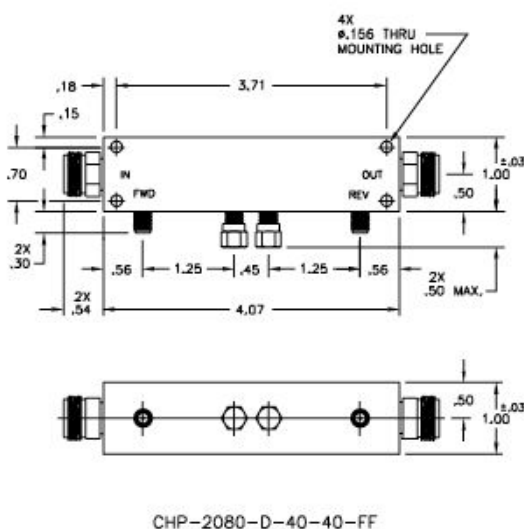
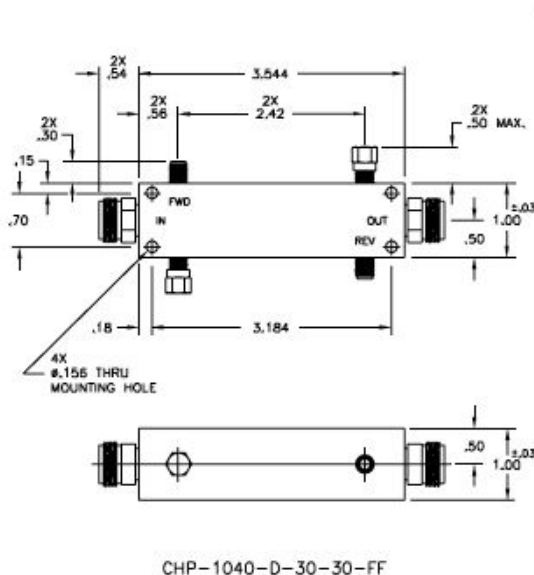
4: Main line connectors (input/output)

MM (male/male), FF (female/female),

MF (male/female), FM (female/male),

Example: CHP-2080-D-40-40-FF is a 2-8GHz coupler with "N" female connectors on the main line and 40dB forward and reverse coupling.

Outline Drawing



High Frequency High Power Directional Couplers



RLC Electronics' high frequency high power directional couplers offer accurate coupling, low insertion loss and high directivity in a compact package. The standard units are optimized for four different frequency ranges and are available with a choice of coupling values. These units are ideal for sampling or injecting signals with a negligible effect on the transmission line. They can be easily modified for different coupling responses or frequency ranges.

Specifications

HCHP-12180⁻¹⁻², HCHP-18265⁻¹⁻²
HCHP-26540⁻¹⁻², HCHP-1840⁻¹⁻²

Model Number	Frequency Range (GHz)	Directivity (Min)	VSWR (Max)	Insertion Loss (Max)	Power AV
HCHP-12180-	12-18	15dB	1.5:1	0.3dB	100W
HCHP-18265-	18-26.5	13dB	1.5:1	0.5dB	80W
HCHP-26540-	26.5-40	11dB	1.8:1	0.7dB	60W
HCHP-1840-	18-40	11dB	1.9:1	0.7dB	60W

Impedance: 50 ohms

Coupling (nominal): 20 or 30dB

Accuracy (including frequency variation): ± 1.0 dB

Connectors: SMA, 2.92 mm for 40 GHz. Main Line- Male or female. Secondary line- female.

To designate the coupler desired use:

1: Coupling value 20 or 30dB

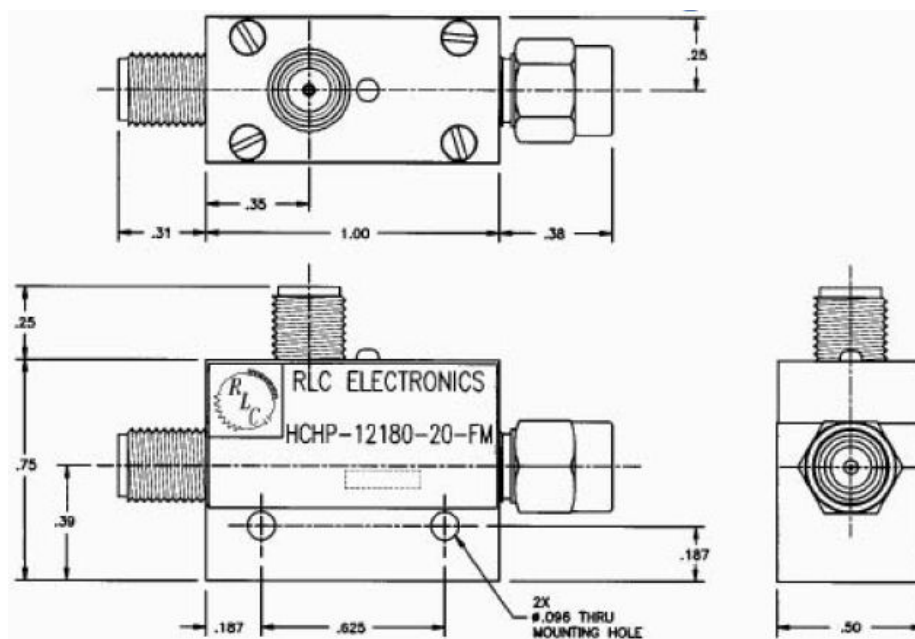
2: Main line connectors (input/output)

MM (male/male), FF (female/female)

MF (male/female), FM (female/male)

Example: HCHP-12180-20-FM is a 12-18GHz, 20dB coupler with 'SMA' female/male connectors (input/output) on the main line

Outline Drawing



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