

# 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):  
+/- 1.0dB

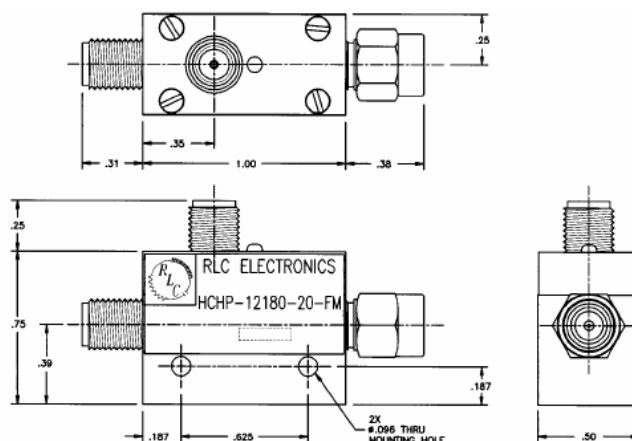
**Connectors:** 'SMA' up to 26.5 GHz "K" compatible  
above 26.5 GHz Main line-male or female  
Secondary line-female

### 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



Specifications subject to change without notification.

Tolerances unless otherwise specified are .xx +/- .02, .xxx +/- .005

Specials requiring closer tolerances, different frequency ranges, special connectors different materials, finishes, etc. can be furnished upon request.



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