

## Bi-Directional Coupler 6 dB N-Female from 130 MHz to 520 MHz

### Directional Couplers Technical Data Sheet

**C-5352-06**

#### Description

Bi-Directional couplers are important components for use in isolating, separating, replicating, and combining microwave signals. They can serve as accurate attenuator measurements as they eliminate reflections. They are incredibly useful in sampling RF signals for use in detectors, gain control and feedback loops.

The C-5352-06 is part of Werbel Microwave's catalog of single and dual directional couplers that offer a wide range of coupling values and frequency ranges. Available with N female connectors.



Specification	Min	Typ.	Max	Units
Frequency	130		520	MHz
Impedance		50		Ohm
Coupling		6.0 ± 1.0		dB
Frequency Sensitivity			± 1.00	dB
Insertion Loss Measured at Highest Frequency			2.2	dB
Directivity	18	25		dB
Main Line VSWR		1.10	1.30	:1
Secondary Line VSWR		1.20	1.30	:1
Input Power (CW) into max load VSWR			60	Watts
Reverse Power (CW) into max load VSWR			3	Watts
Termination			1	Watts
Input Peak Power (1μsec, 2% duty)			3	kW

#### Mechanical

Connector Interface	N-Female
Operating Temperature*	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight	20 oz (570 g)
Humidity	10-90% non-condensing

#### Materials

##### RoHS and REACH Compliant

Enclosure	Aluminum
Connectors	Brass, Tri-Alloy Plate
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Clear Chem Film

\* Design to meet based on materials. Production-tested at +25 °C. External heatsink and convection cooling recommended to maintain body temperature below +50 °C.

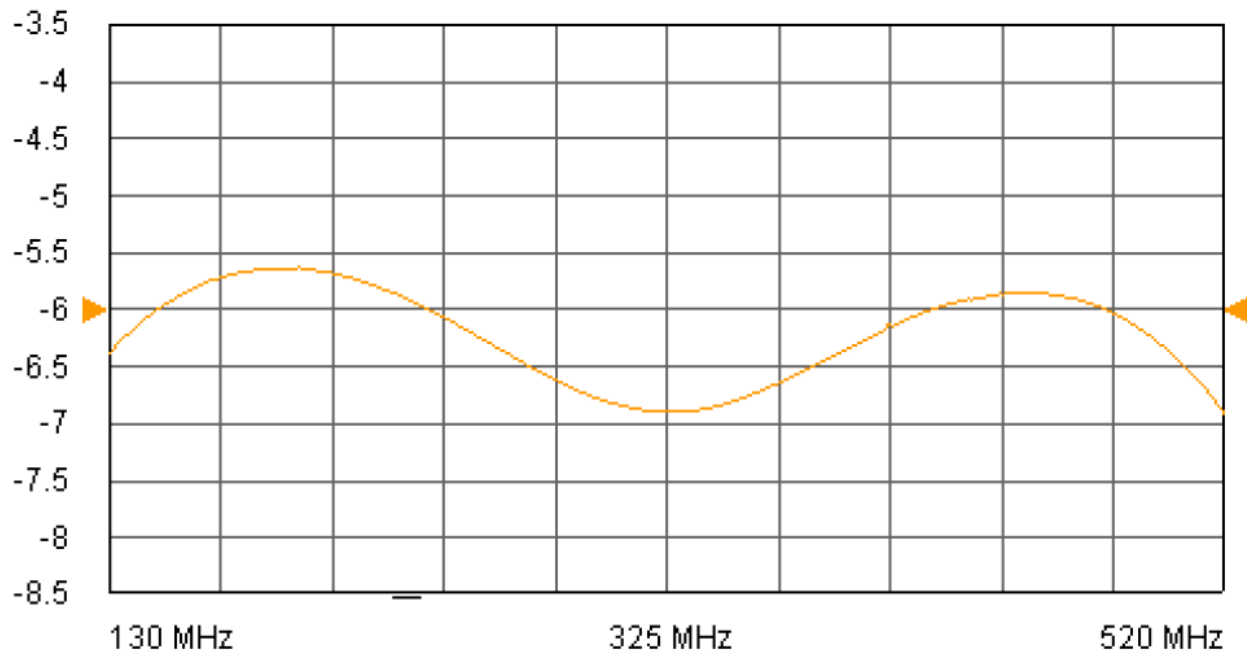


**MADE IN USA**

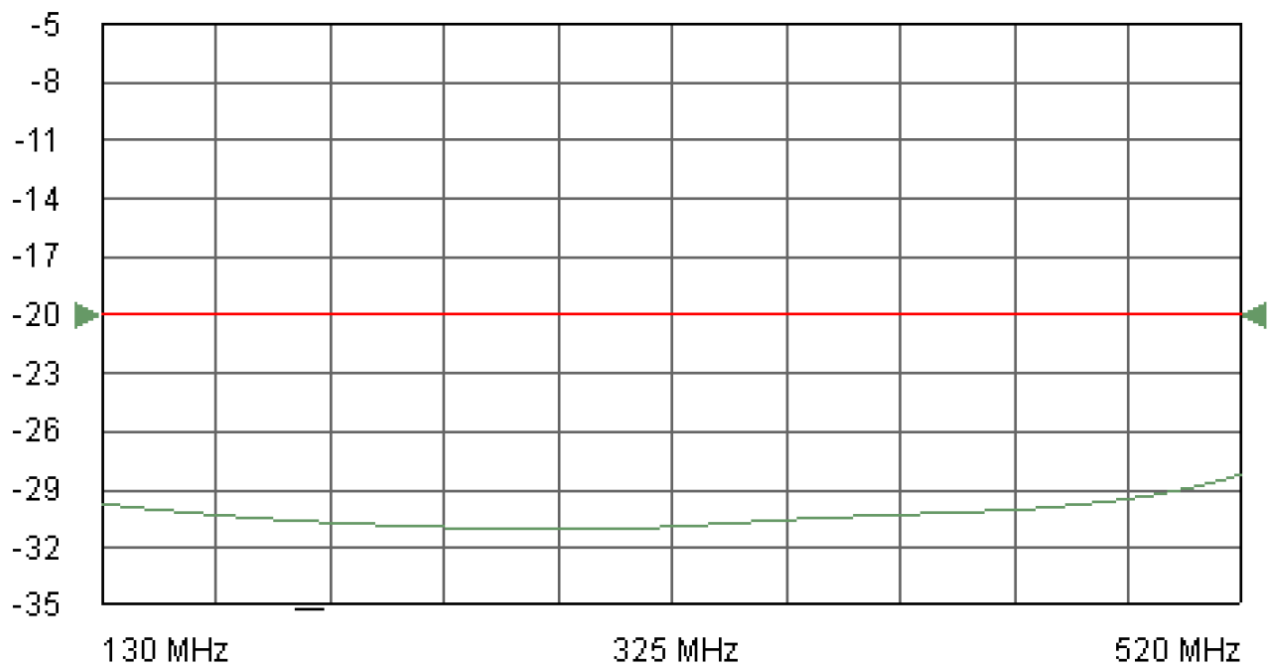


## Typical Performance at +25 °C

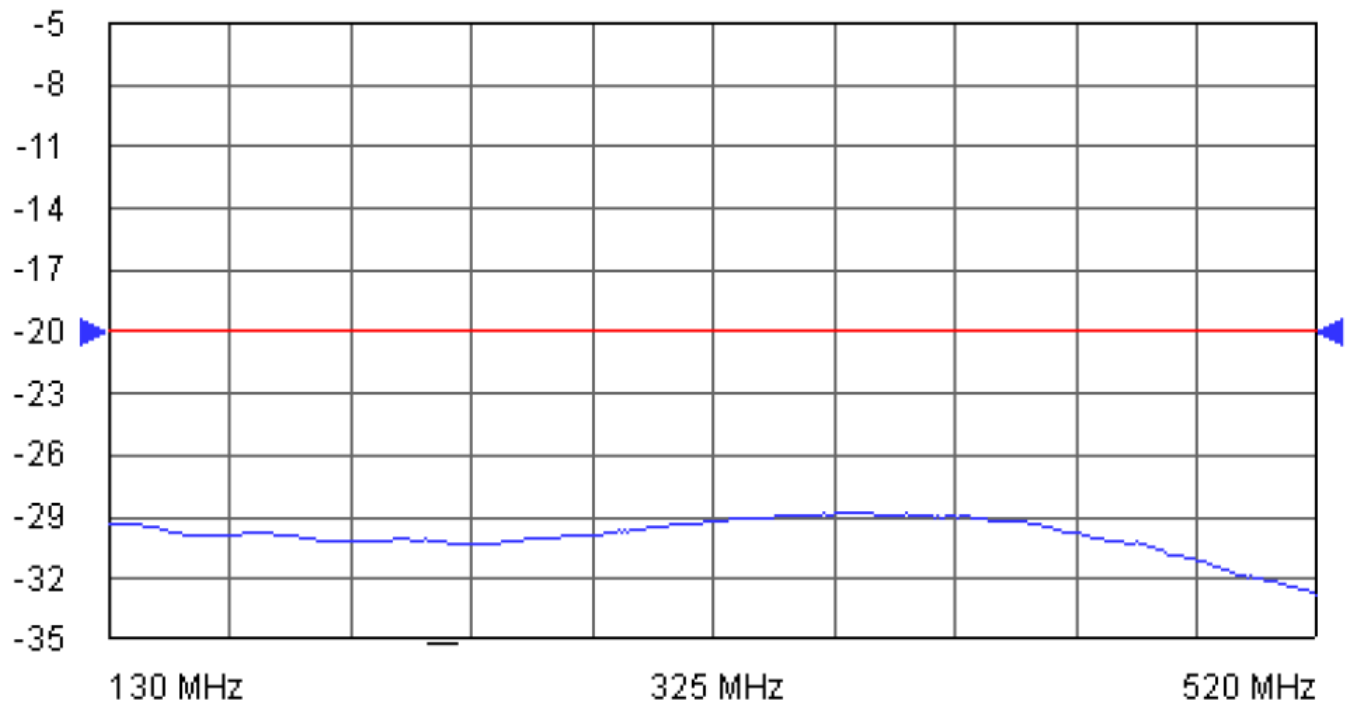
### Coupling Value and Flatness



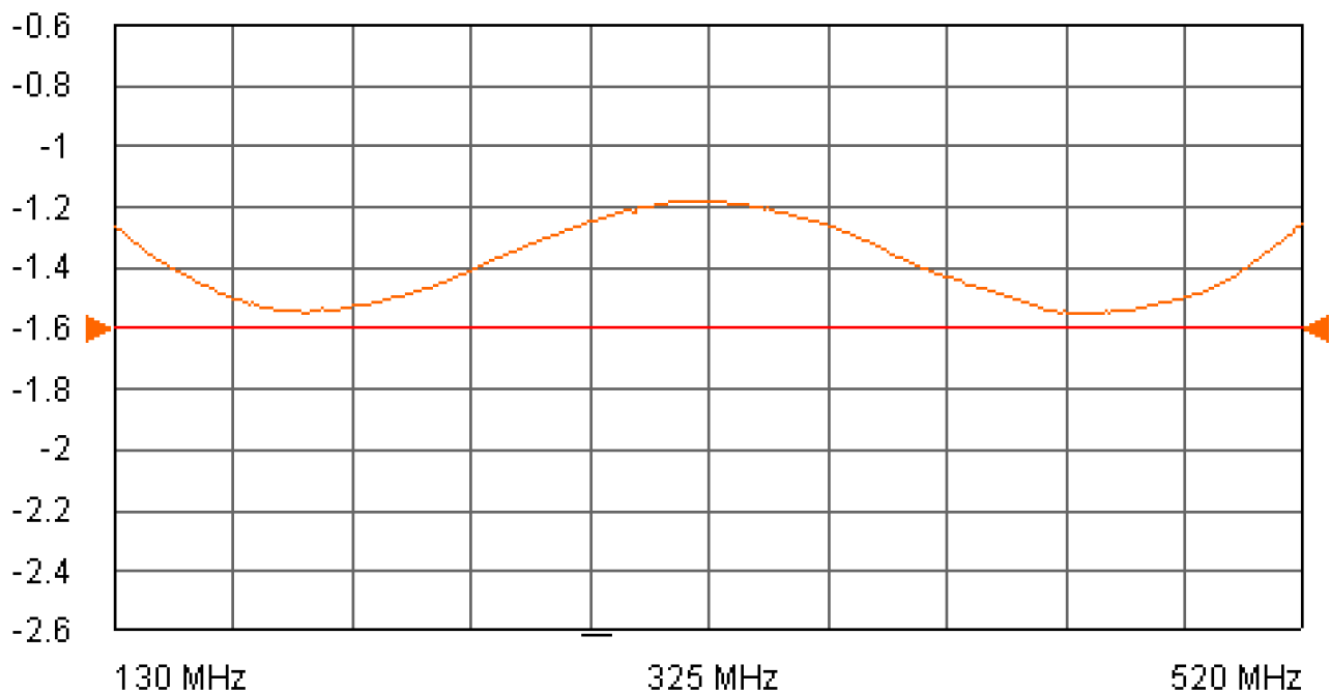
### Directionality



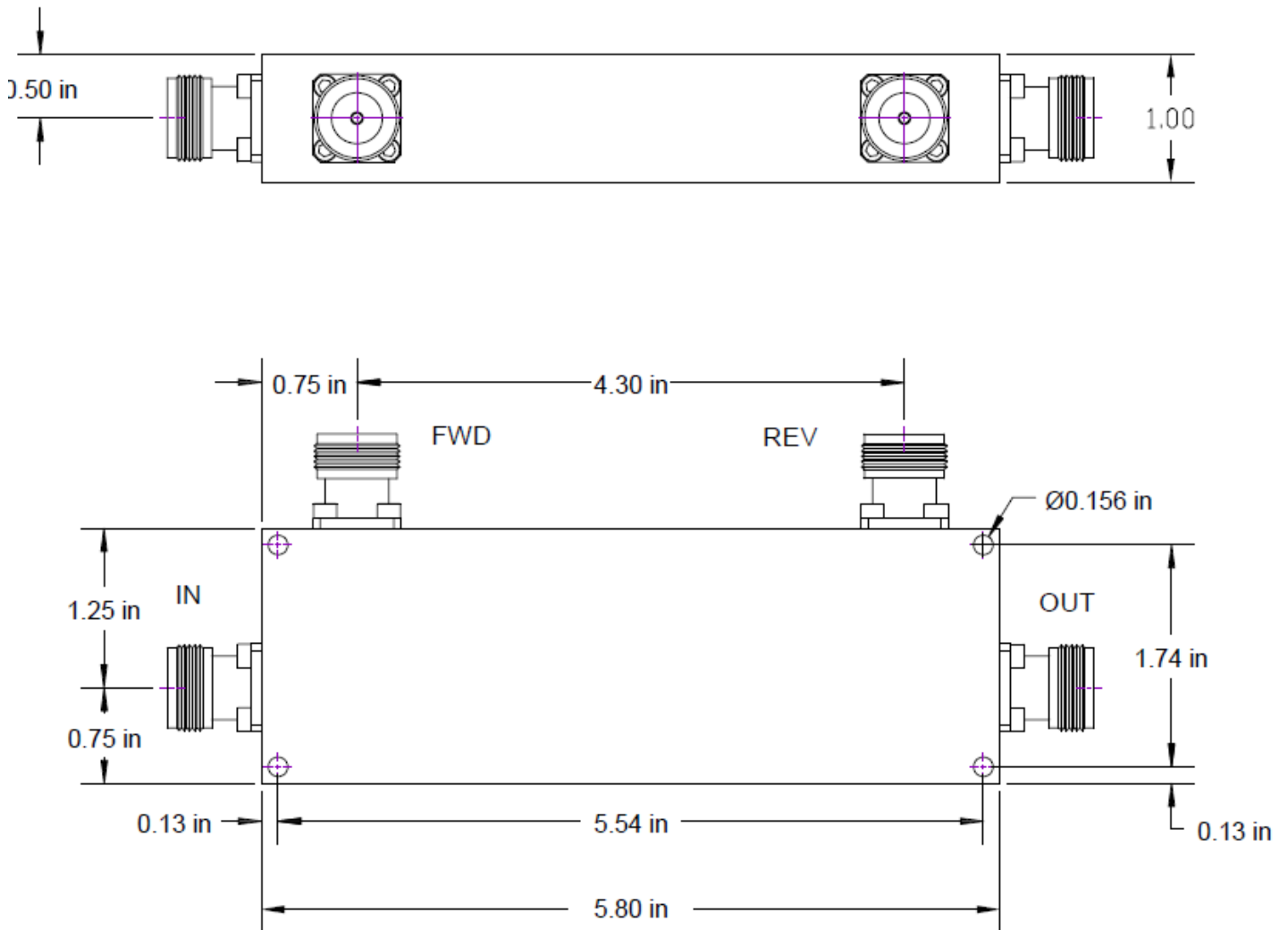
## Return Loss



## Insertion Loss



## Outline Dimensions



Outline # OL-5352-N

Dimensions are in inches, [mm] shown for convenience.

Tolerances on 2-pl decimals:  $\pm .03$ . 3-pl decimals:  $\pm .015$ .

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