

Directional Coupler 6 dB SMA Female from 500 MHz to 2 GHz

Directional Couplers Technical Data Sheet

C-1002-06

Description

Model C-1002-06 directional coupler from Werbel Microwave features a single output of 6 +/- 1.0 dB over the 500 MHz to 2 GHz frequency range. This is a high performance coupler featuring maximum VSWR of 1.20:1 at all ports. With a low insertion loss and high directivity, it will integrate seamlessly into your measurements. Aluminum enclosure measures 3.60 x 0.60 x 0.38 inches. SMA female connectors are stainless steel. The unit is manufactured in the USA by highly skilled technicians at our Whippany, New Jersey facility.



Specification	Min	Typ.	Max	Units
Frequency	500		2,000	MHz
Impedance		50		Ohm
Coupling		6 ± 1.0		dB
Frequency Sensitivity (Flatness)		± 0.75	± 1.25	dB
Insertion Loss Measured at Highest Frequency (above theoretical coupling/splitting loss)			2.00 (0.35)	dB
Directivity	18	23		dB
Main Line VSWR		1.15	1.20	:1
Secondary Line VSWR		1.15	1.20	:1
Input Power (CW) into 1.2:1 max load VSWR			50	Watts
Reverse Power (CW) into 1.2:1 max load VSWR			3	Watts
Termination			1	Watt

Mechanical

Connector Interface	SMA-Female
Operating Temperature*	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight	1.5 oz (42 g)
Humidity	10-90% non-condensing
Environment	Indoor Use Only

Materials

RoHS and REACH Compliant

Enclosure	Aluminum
Connectors	Stainless Steel
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Gray Paint

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

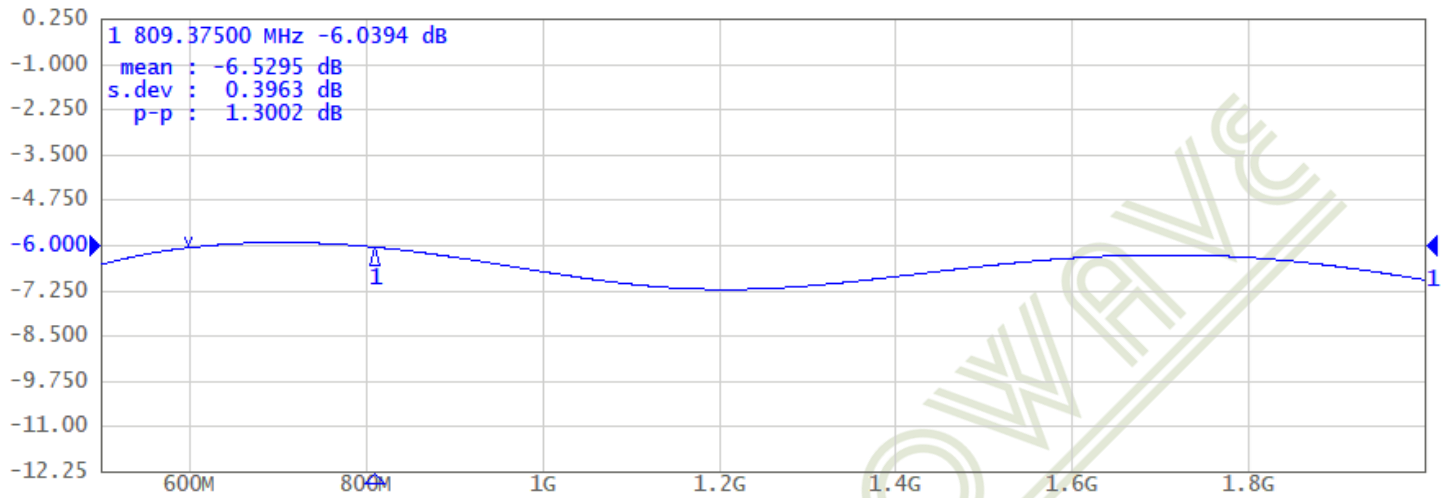


MADE IN USA

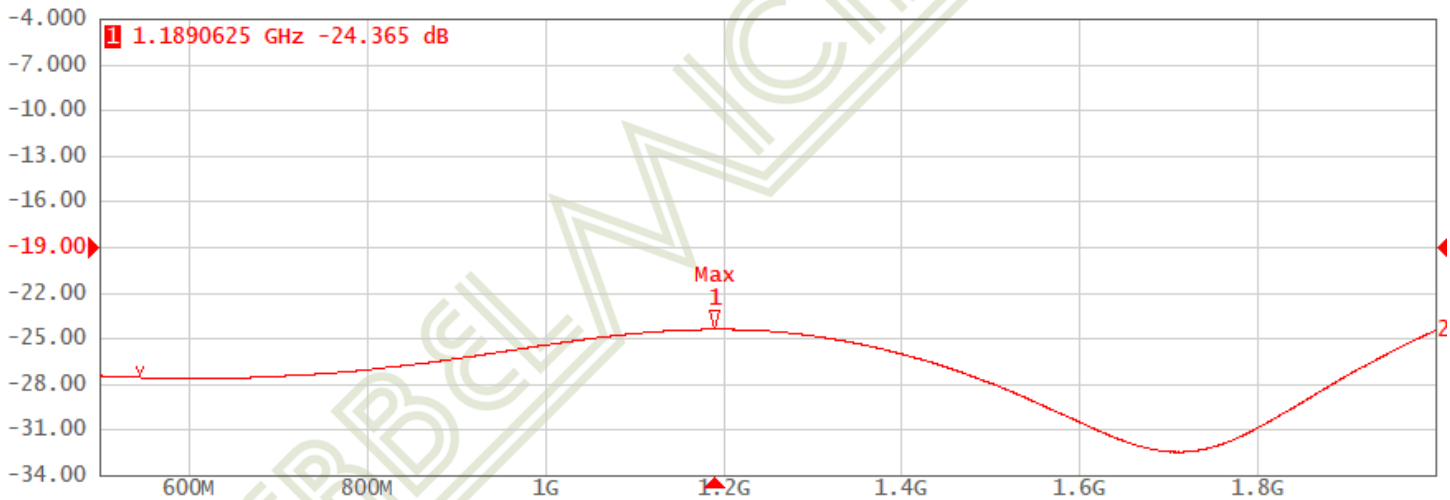


Typical Performance at +25 °C

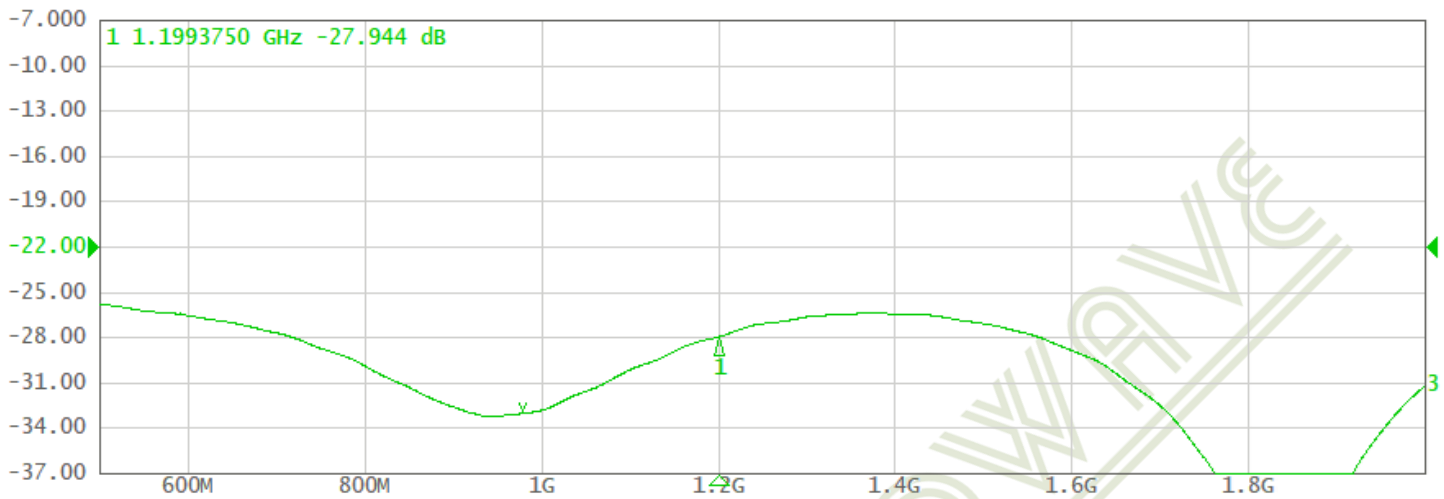
Coupling Value and Flatness



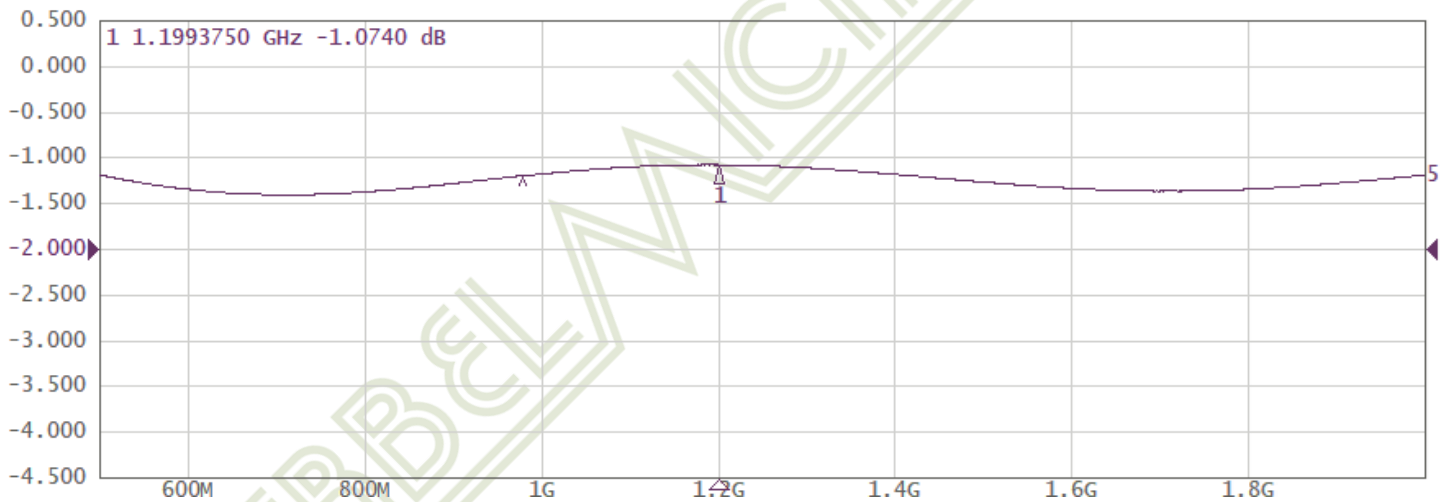
Directionality



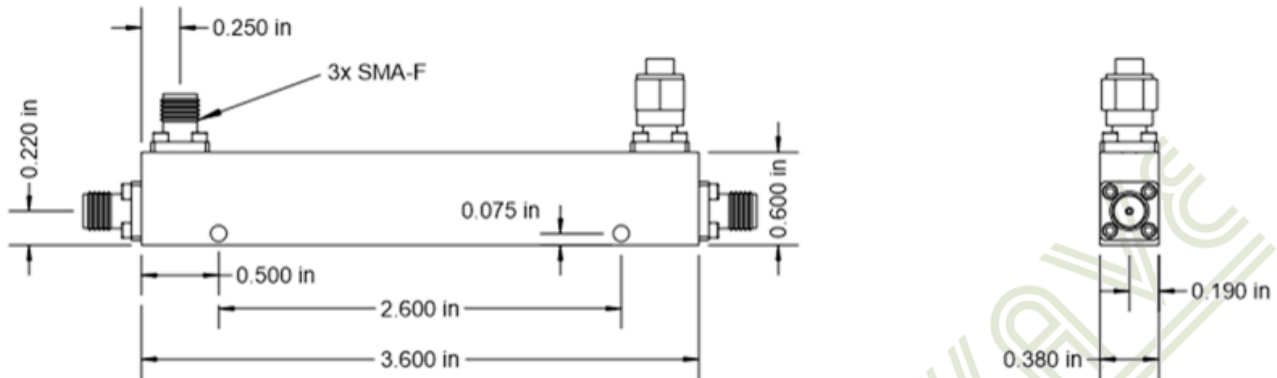
Return Loss



Insertion Loss



Outline Dimensions



Outline # OL-1002

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

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

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