

Directional Coupler 6 dB SMA Female from 2 GHz to 8 GHz

Directional Couplers Technical Data Sheet

C-0208-06

Description

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.

When you need a 6 dB coupler to cover 2 to 8 GHz, Werbel Microwave C-0208-06 meets the task. Good VSWR and directivity performance. Aluminum enclosure with stainless steel connectors. High quality and made in USA.



Specification	Min	Typ.	Max	Units
Frequency	2		8	GHz
Impedance		50		Ohm
Coupling		6.5 ± 1.0		dB
Frequency Sensitivity (Flatness)		± 0.50	± 1.25	dB
Insertion Loss (above theoretical coupling/splitting loss)			2.00 (0.50)	dB
Directivity	18			dB
Main Line VSWR			1.25	:1
Secondary Line VSWR			1.25	: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	Watts

Mechanical

Connector Interface	SMA-Female
Operating Temperature*	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight	1 oz (28 g)
Humidity	10-90% non-condensing
Environment	Indoor Use Only

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

Materials

RoHS and REACH Compliant

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



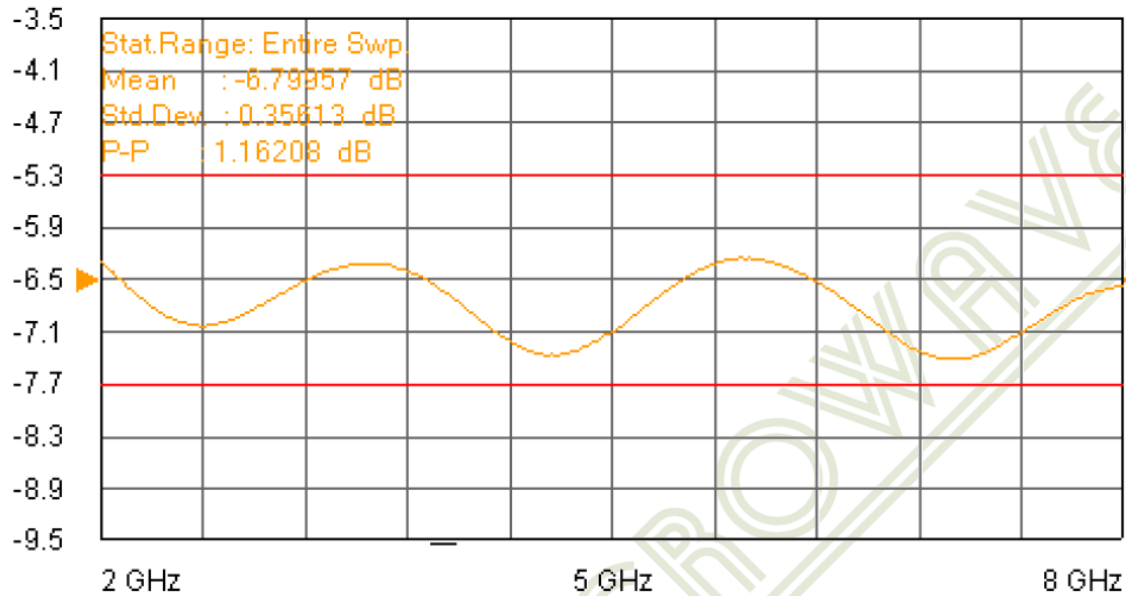
MADE IN USA

ISO 9001:2015

Certified Company

Typical Performance at +25 °C

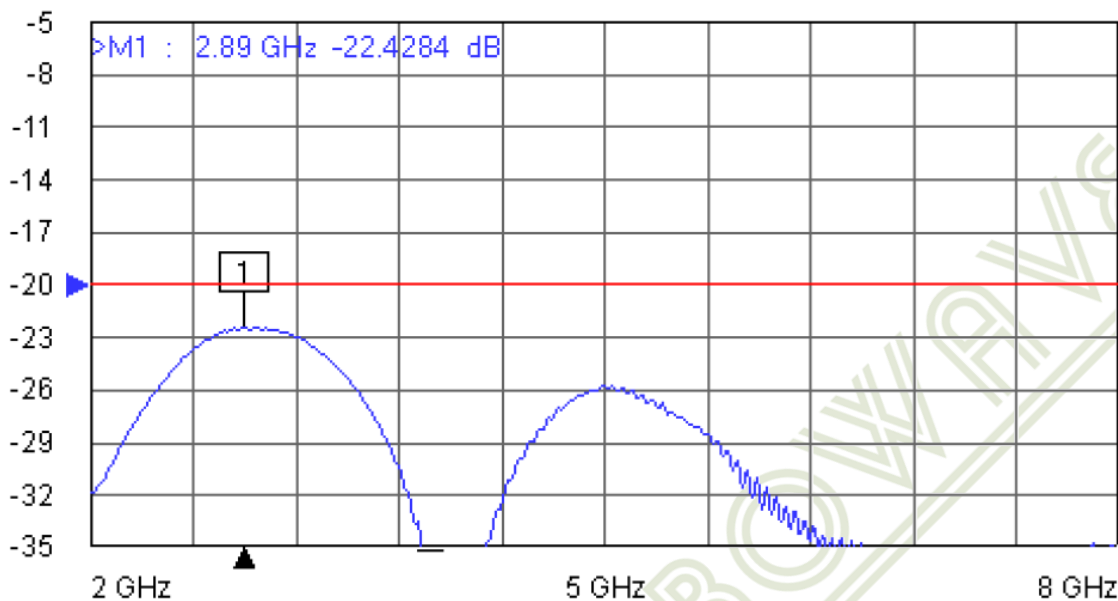
Coupling Value and Flatness



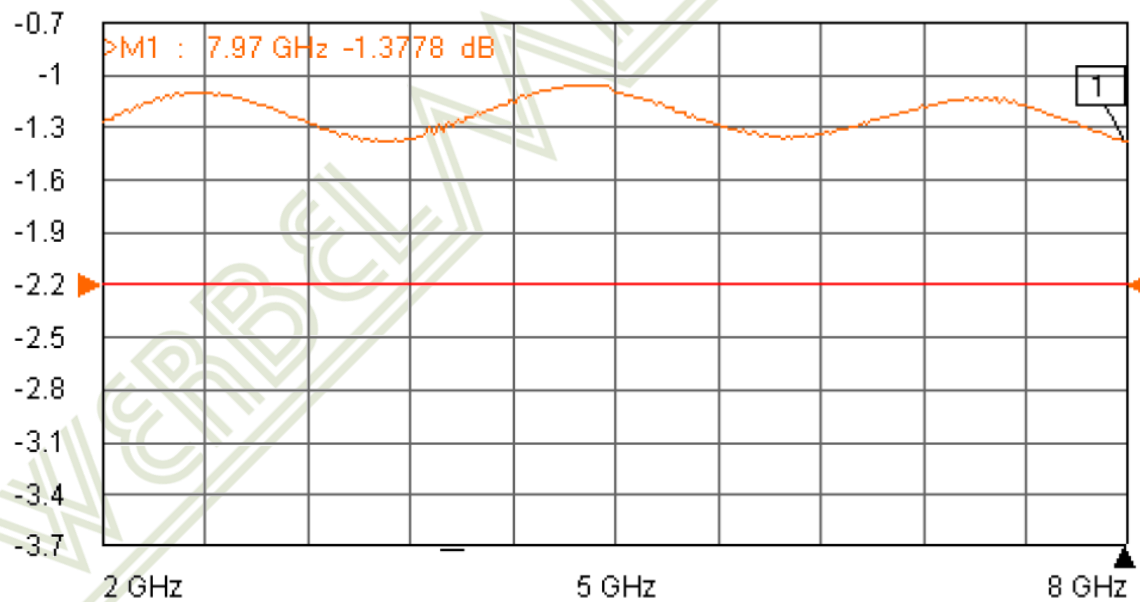
Directionality



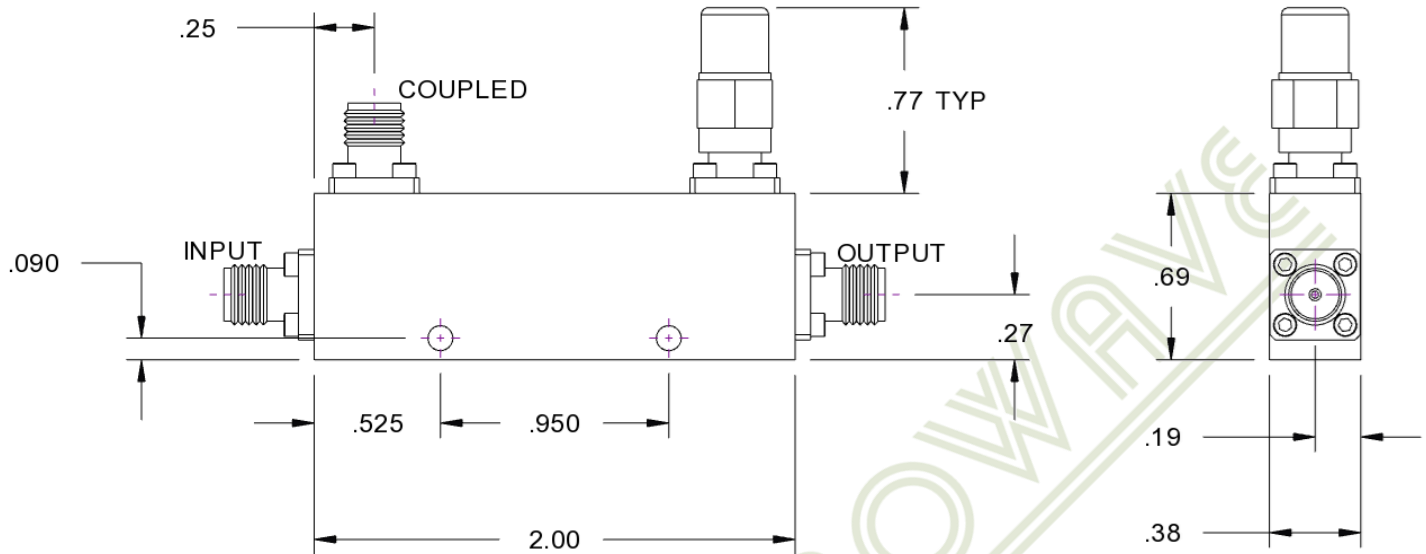
Return Loss



Insertion Loss



Outline Dimensions



Outline # OL-1305-1

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

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

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