

High Performance Wideband Directional Coupler 15 dB SMA Female from 2 GHz to 18 GHz

Directional Couplers Technical Data Sheet

C-1182-15

Description

Directional coupler model C-1182-15 from Werbel Microwave is a high performance wideband directional coupler that covers 2 to 18 GHz with 15 dB coupling and a typical flatness of +/- 0.35 dB. It has excellent return loss and low insertion loss.

Werbel Microwave's catalog of single directional couplers are high performance at an affordable price point. Our original design, USA made.



Specification	Min	Typ.	Max	Units
Frequency	2		18	GHz
Impedance		50		Ohm
Coupling		15 ± 1.0		dB
Frequency Sensitivity (Flatness)		± 0.35	± 1.0	dB
Mainline Loss Measured		0.8	1.4	dB
Directivity	14	17		dB
Main Line VSWR		1.25	1.58	:1
Secondary Line VSWR		1.35	1.58	:1
Input Power (CW) into 1.2:1 max load VSWR (Up to +85C derate linearly to 10W at +100C)			20	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	1.4 oz (40 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



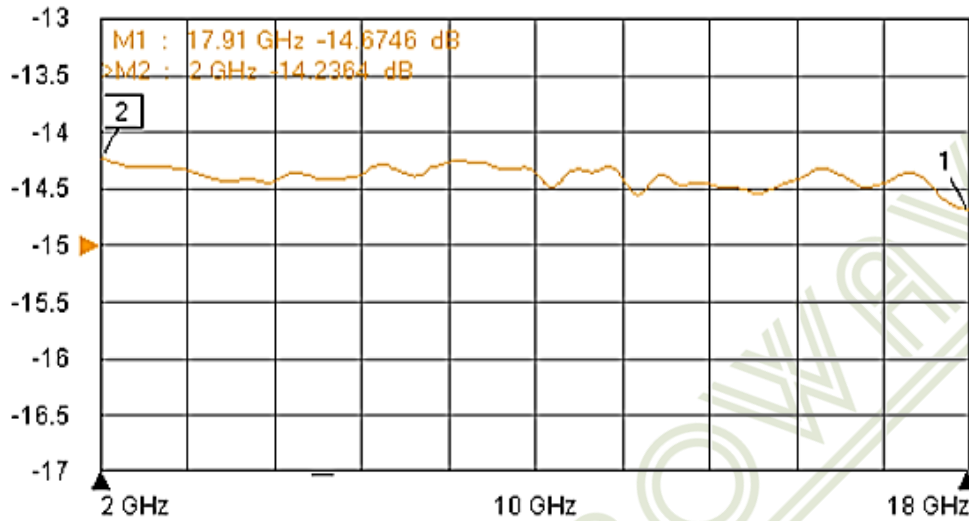
MADE IN USA

ISO 9001:2015

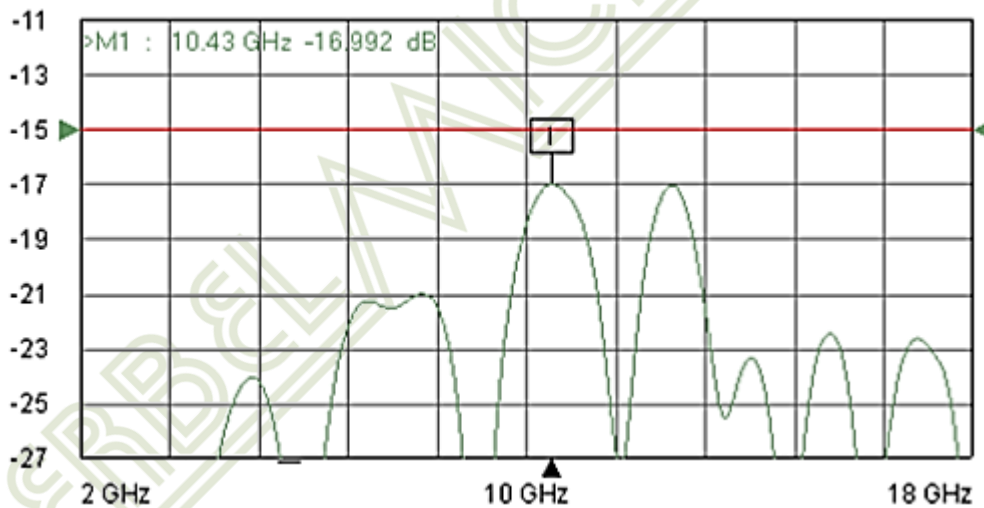
Certified Company

Typical Performance at +25 °C

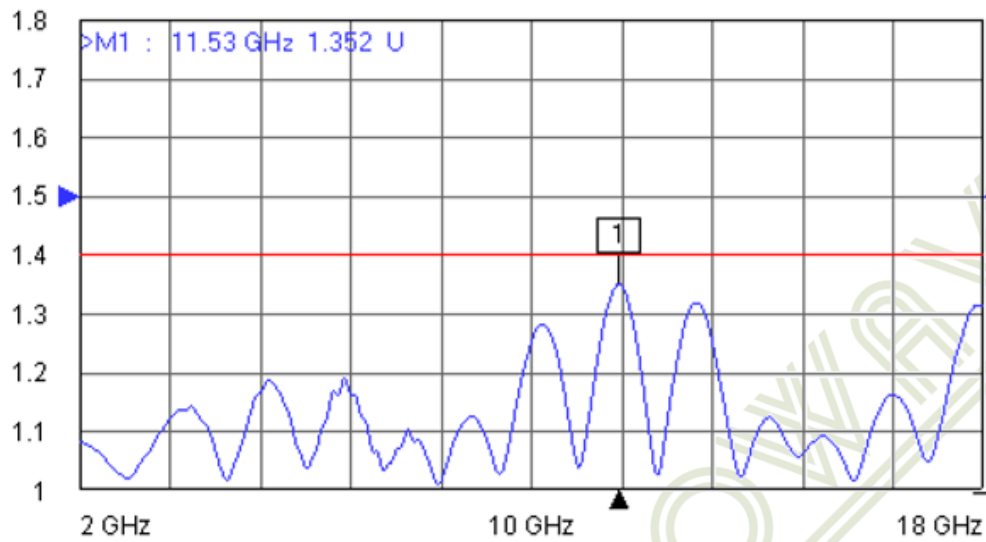
Coupling Value and Flatness



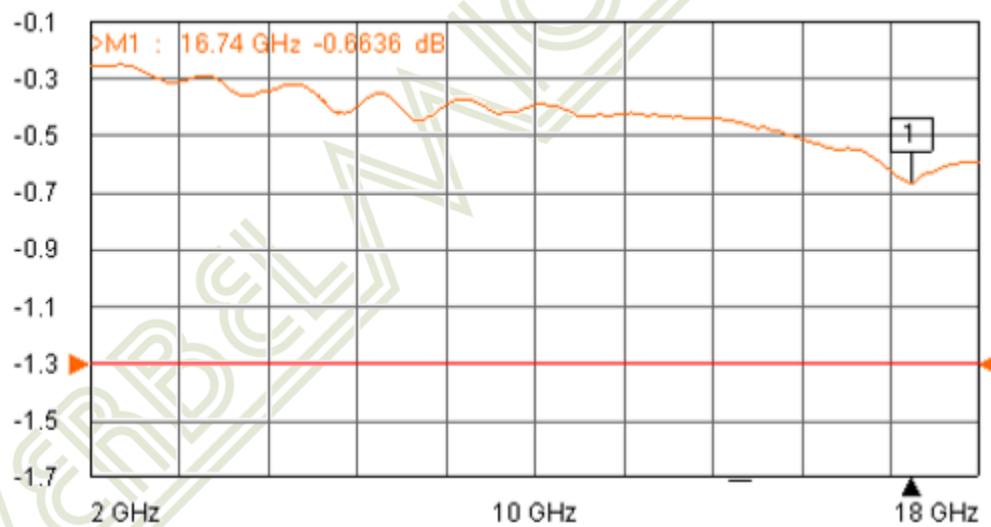
Directionality



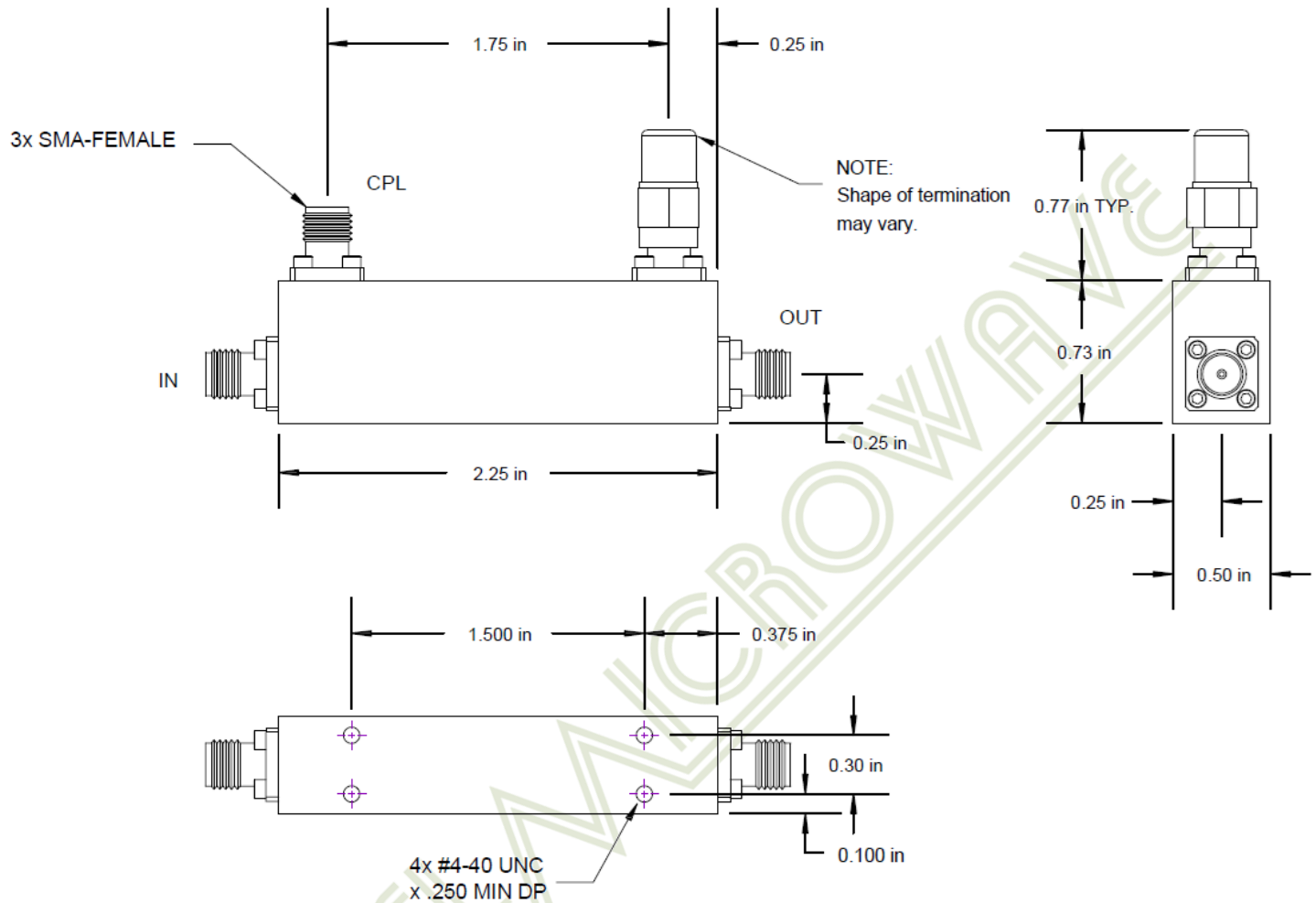
Return Loss



Insertion Loss



Outline Dimensions



Outline # OL-1182

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

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

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