

High Performance Wideband Directional Coupler 10 dB SMA Female from 2 GHz to 18 GHz

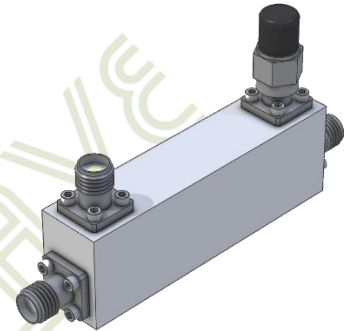
Directional Couplers Technical Data Sheet

C-1182-10

Description

Directional coupler model C-1182-10 from Werbel Microwave is a high performance wideband directional coupler that covers 2 to 18 GHz with 10 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		10 ± 1.0		dB
Frequency Sensitivity		± 0.35	± 1.0	dB
Insertion Loss Measured at Highest Frequency		0.8	1.3	dB
Directivity	12	17		dB
Main Line VSWR		1.25	1.50	:1
Secondary Line VSWR		1.35	1.60	:1
Input Power (CW) into 1.2:1 max load VSWR			20	Watts
Reverse Power (CW) into 1.2:1 max load VSWR			3	Watts
Termination			1	Watts
Input Peak Power (1μsec, 2% duty)			3	kW

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

Materials

RoHS and REACH Compliant

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

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



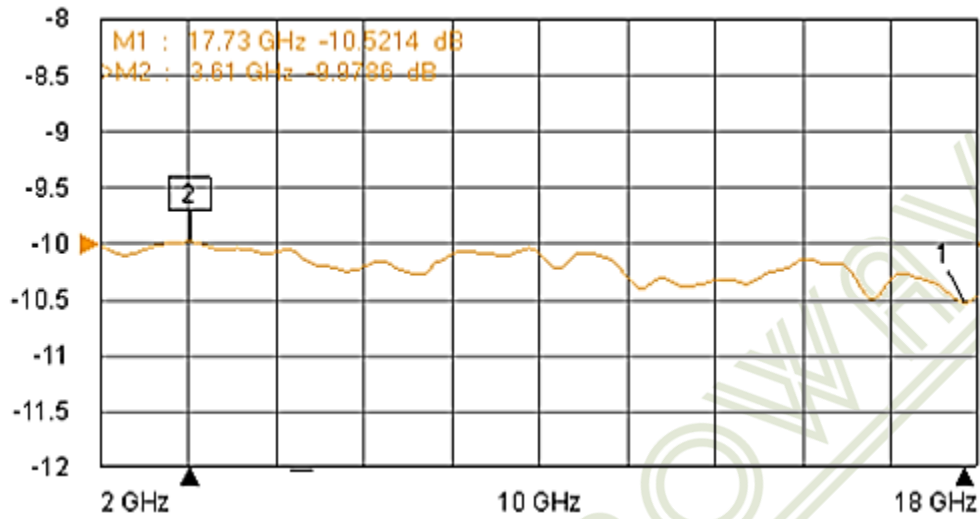
MADE IN USA

ISO 9001:2015

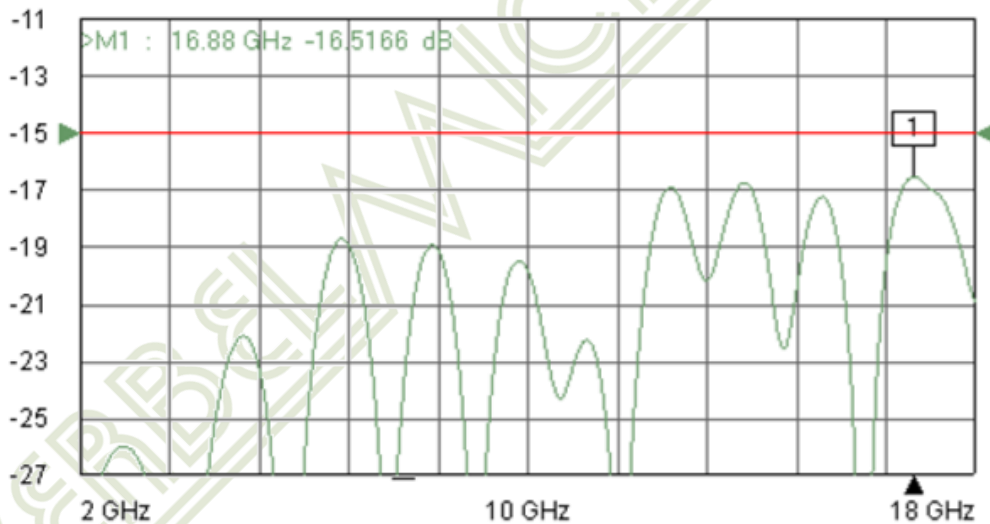
Certified Company

Typical Performance at +25 °C

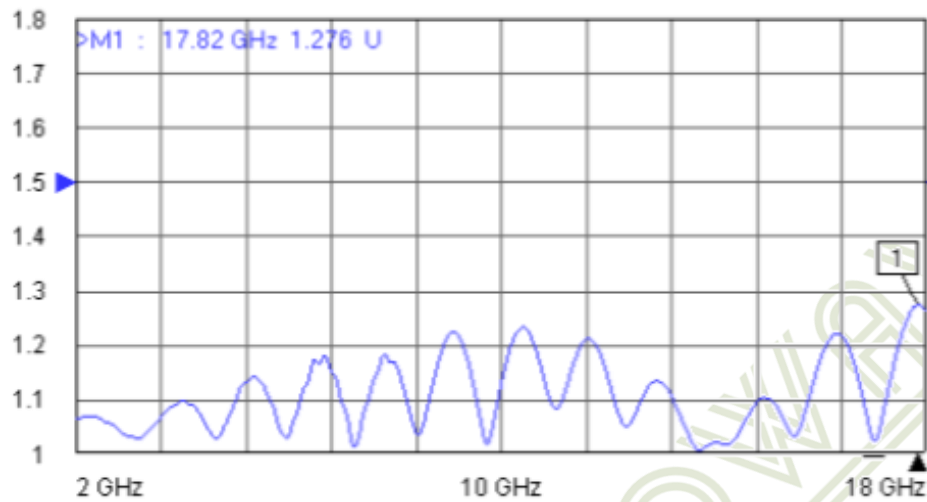
Coupling Value and Flatness



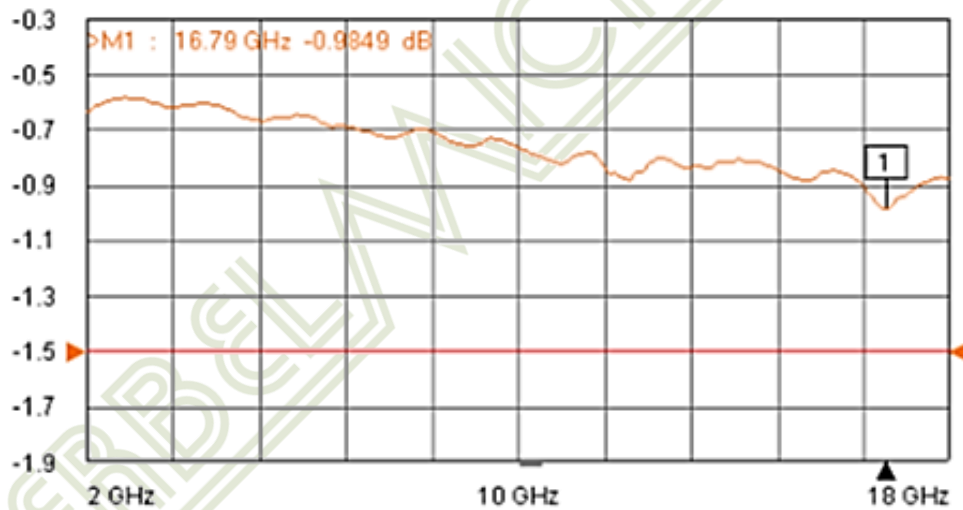
Directionality



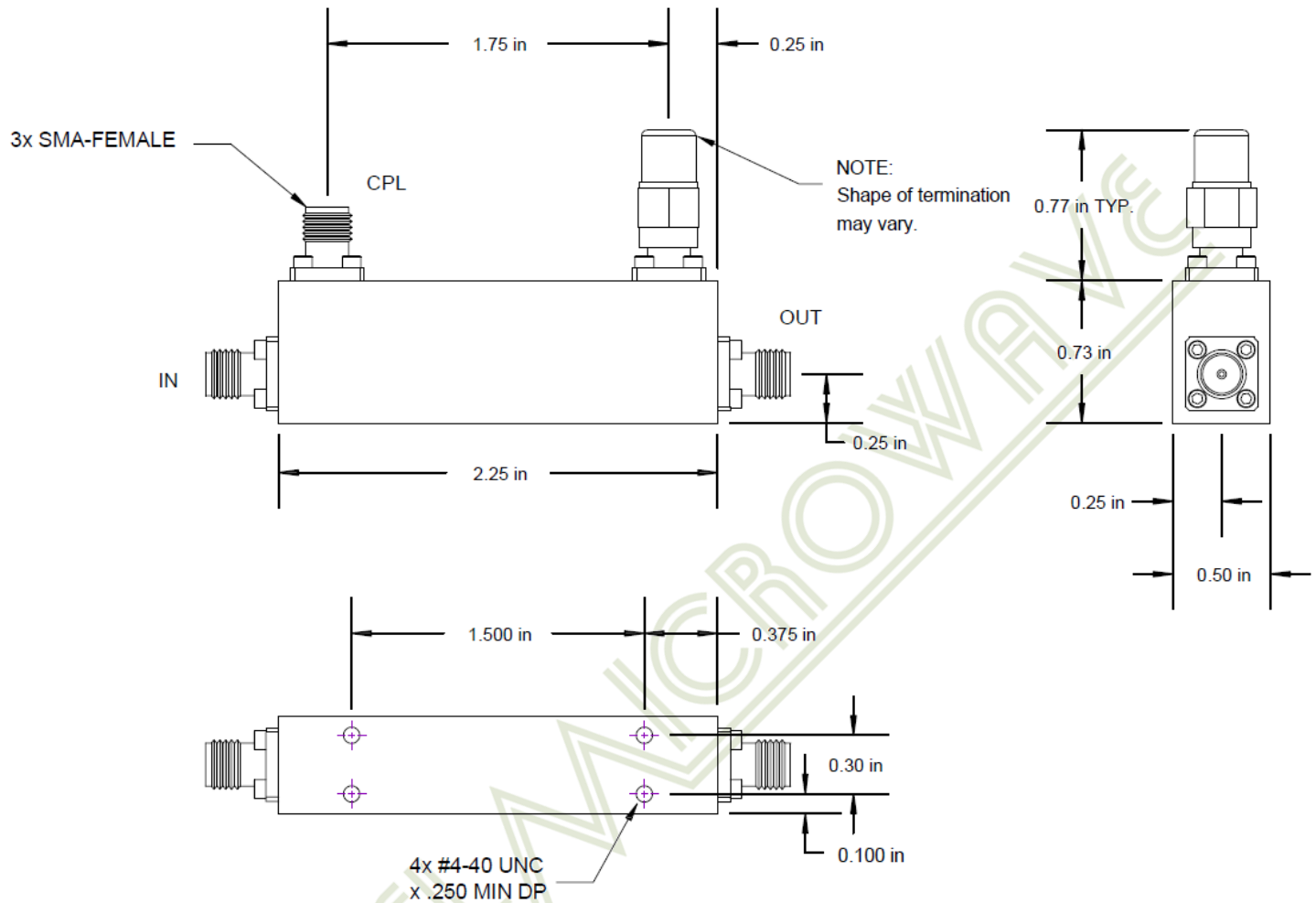
Return Loss



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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