

Directional Coupler 30 dB SMA Female from 300 MHz to 8 GHz

Directional Couplers Technical Data Sheet

C-1830-30

Description

Model C-1830-30 from Werbel Microwave is a directional coupler that covers 300 MHz to 8 GHz with broadband flat coupling response, high directivity, and excellent return loss performance. Product of USA.



Photo is representative.

Specifications Guaranteed at +25 °C	Min	Typ.	Max	Units
Frequency	0.3		8	GHz
Impedance		50		Ohm
Coupling		30 ± 2.0		dB
Frequency Sensitivity (Flatness)		± 0.60	± 1.20	dB
Insertion Loss (Above theoretical coupling/splitting loss)		0.51	1.00	dB
Directivity	(up to 6 GHz)	16	22.5	dB
	(6 to 8 GHz)	14	18.7	
Main Line Return Loss	(up to 6 GHz)	16		dB
	(6 to 8 GHz)	15		
Secondary Line Return Loss	(up to 6 GHz)	16		dB
	(6 to 8 GHz)	15		
Input Power (CW) into 1.2:1 max load VSWR			50	Watts
Reverse Power (CW) into 1.2:1 max load VSWR			50	Watts
Termination			1	Watts

Mechanical

Connector Interface	SMA-Female
Functional Temperature*	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight	3.5 oz (86 g)
Humidity	10-90% non-condensing
Environment	Indoors Use Only

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. ** To the best of our knowledge at time of publication.

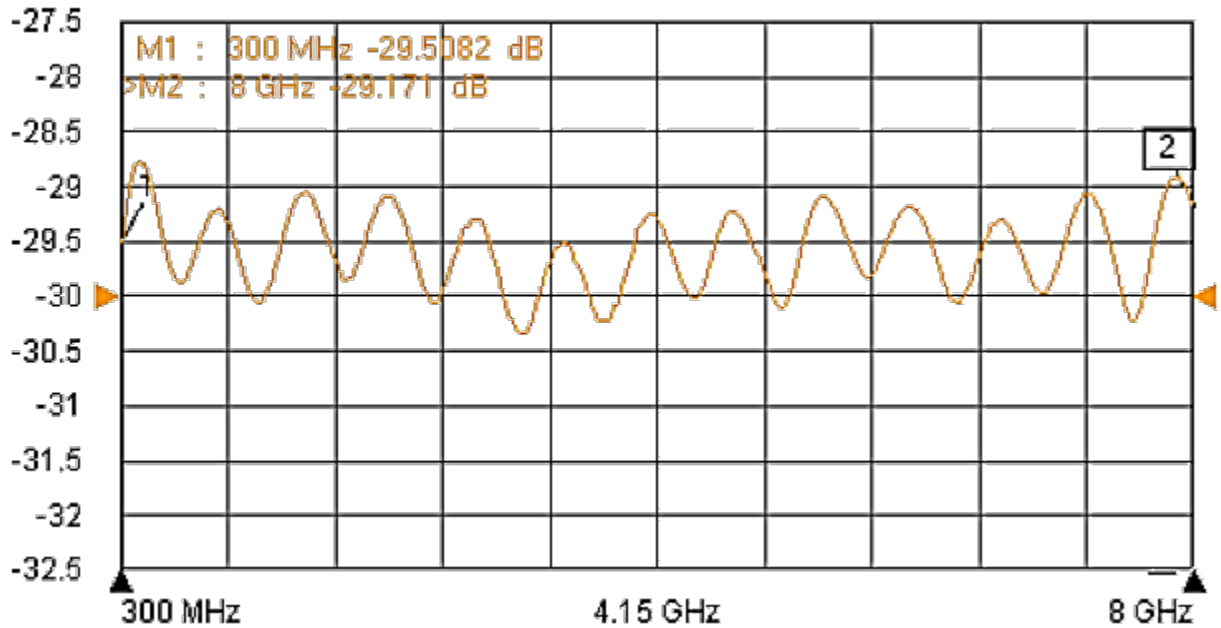


MADE IN USA

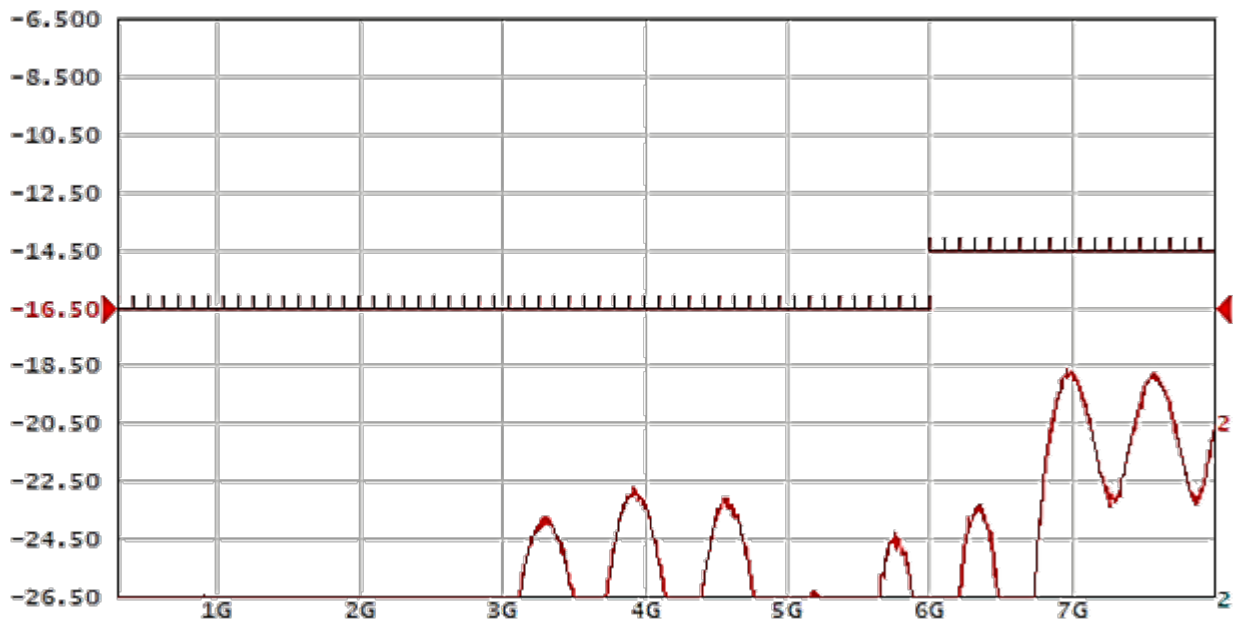


Typical Performance at +25 °C

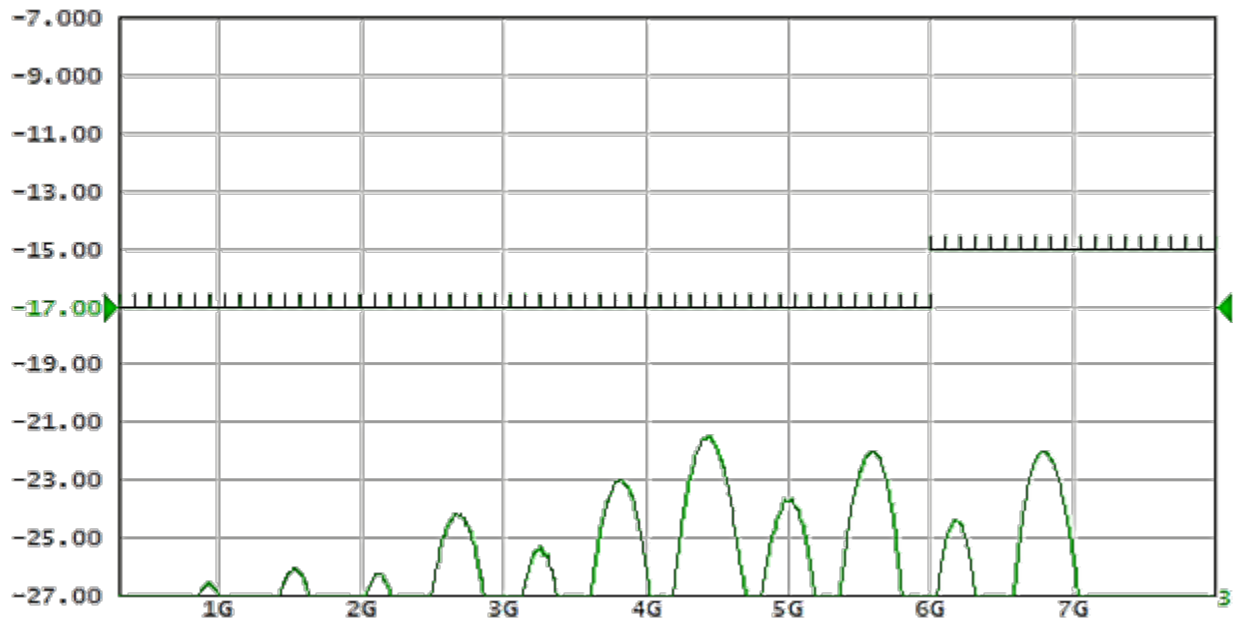
Coupling Value and Flatness



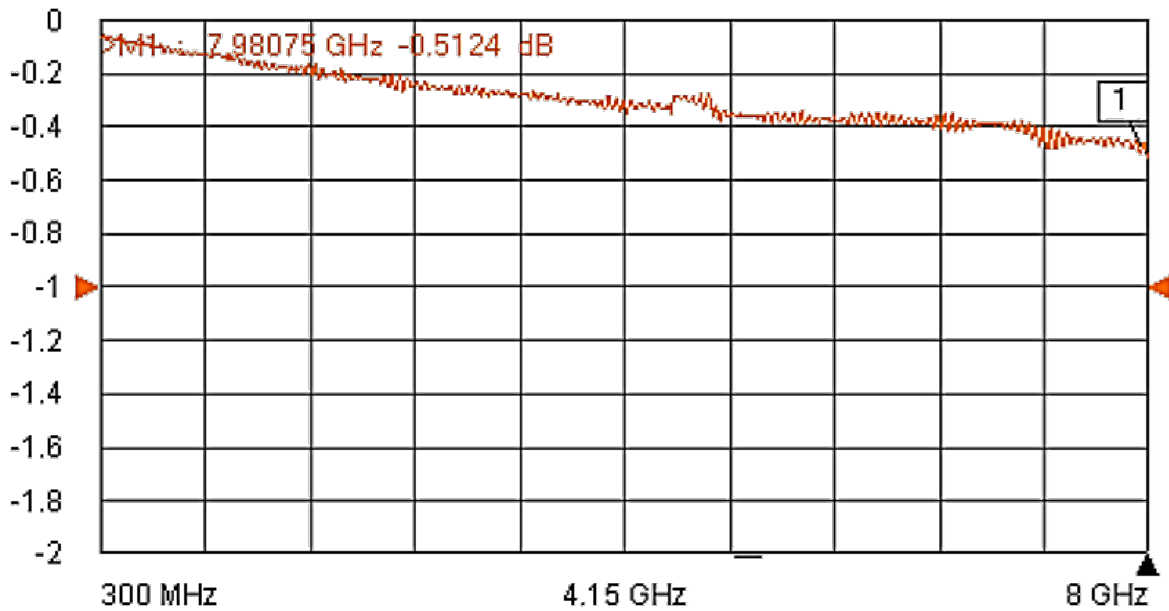
Directionality



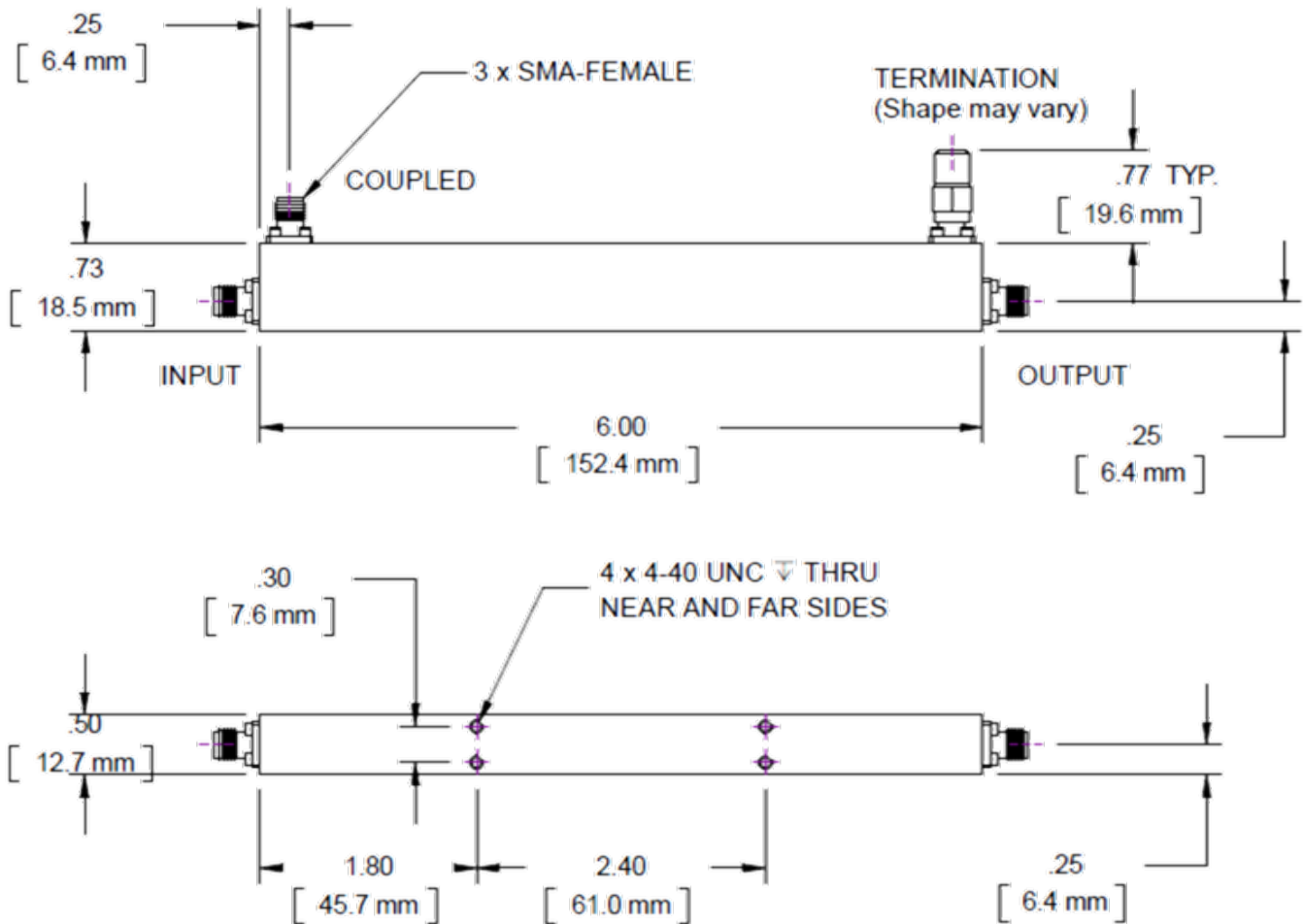
Return Loss



Insertion Loss



Outline Dimensions



Outline # OL-1830

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

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

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