

Economy Directional Coupler 6 dB N Female from 380 MHz to 2.7 GHz

Directional Couplers Technical Data Sheet

C-1276-06

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.

The C-1276-06 is part of Werbel Microwave's catalog of single and dual directional couplers that offer a wide range of coupling values and frequency ranges. Available with N female connectors.



Specification	Min	Typ.	Max	Units
Frequency	0.38		2.7	GHz
Impedance		50		Ohm
Coupling		6 ± 1.0		dB
Frequency Sensitivity		± 1.0		dB
Insertion Loss Measured at Highest Frequency (above theoretical coupling/splitting loss)			0.7	dB
Directivity	18	23		dB
Main Line VSWR		1.15	1.35	:1
Secondary Line VSWR		1.2	1.35	:1
Input Power (CW) into 1.2:1 max load VSWR			60	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	20 oz (570 g)
Humidity	10-90% non-condensing
Environment	Indoor Use Only

Materials

RoHS and REACH Compliant

Enclosure	Aluminum
Connectors	Brass, Tri-Alloy Plate
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Clear Chem Film

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



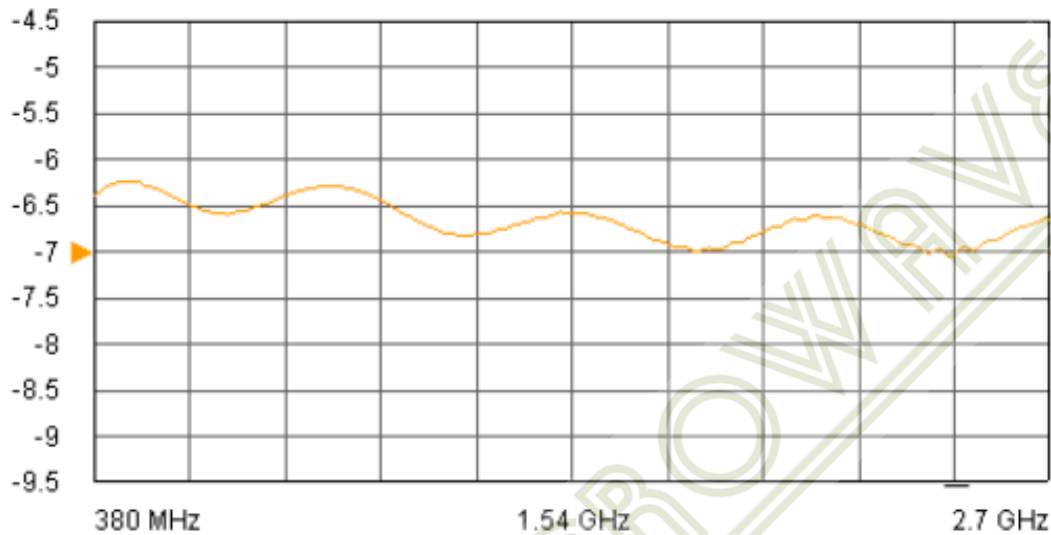
MADE IN USA



Typical Performance at +25 °C

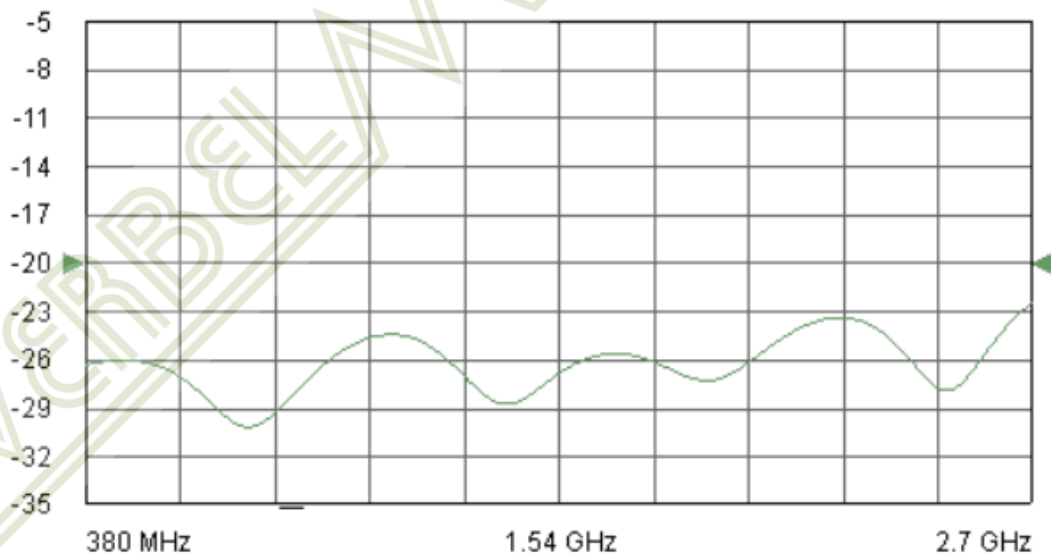
Coupling Value and Flatness

Tr1 S21 Trans LogM RefLvl: -7 dB Res: 0.5 dB/Div



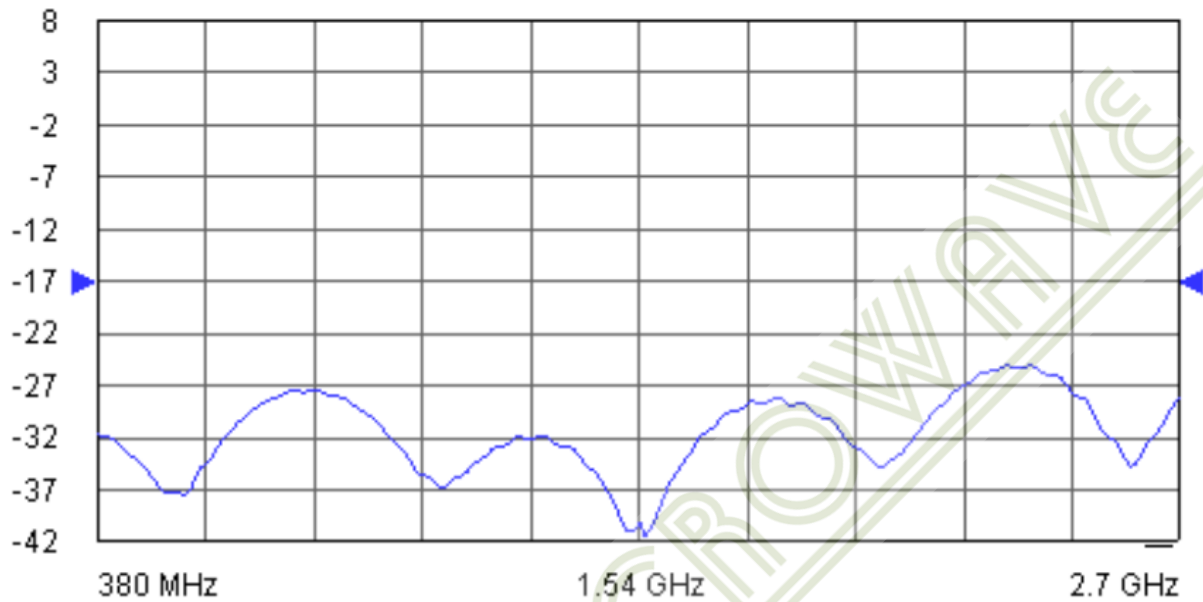
Directionality

Tr2 [D/M] S21 Trans LogM RefLvl: -20 dB Res: 3 dB/Div



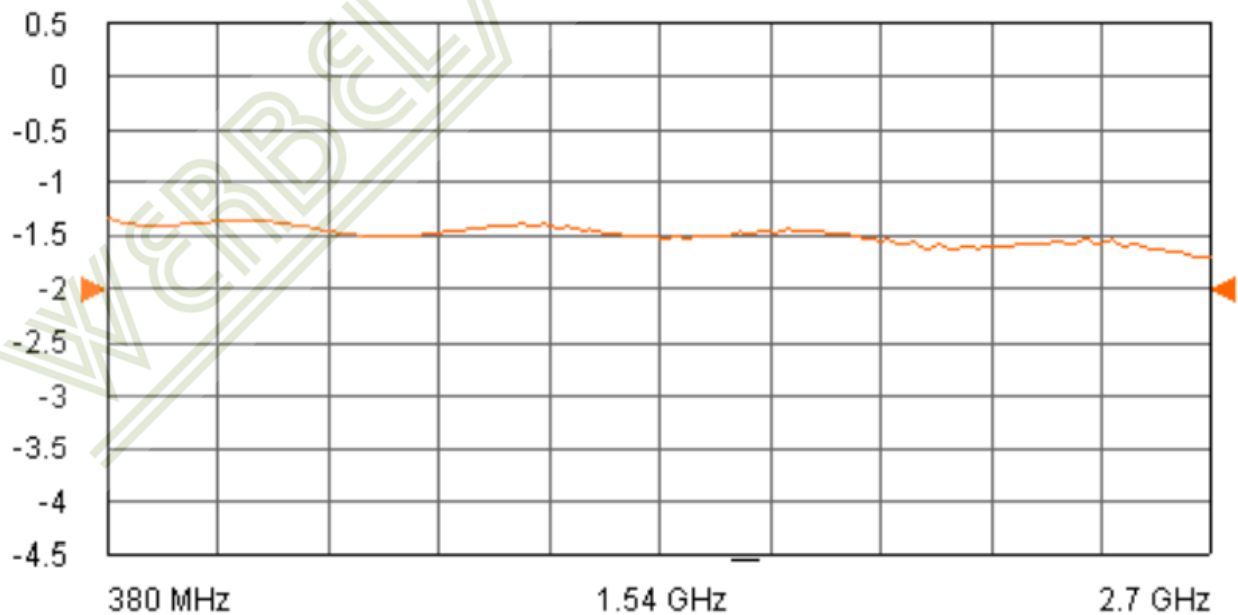
Return Loss

Tr3 S11 Refl LogM RefLvl: -17 dB Res: 5 dB/Div

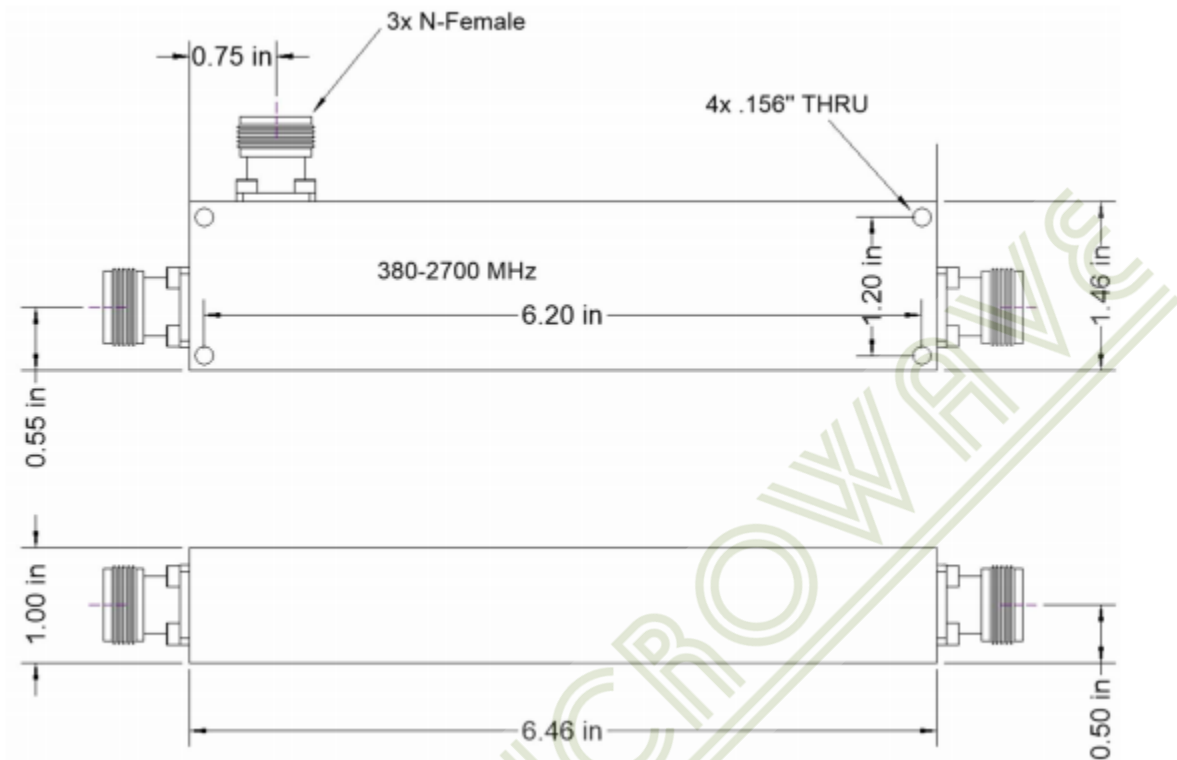


Insertion Loss

Tr5 S21 Trans LogM RefLvl: -2 dB Res: 0.5 dB/Div



Outline Dimensions



Outline # OL-1276-N

Dimensions are in inches, [mm] shown for convenience.
Tolerances on 2-pl decimals: $\pm .03$. 3-pl decimals: $\pm .015$.

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