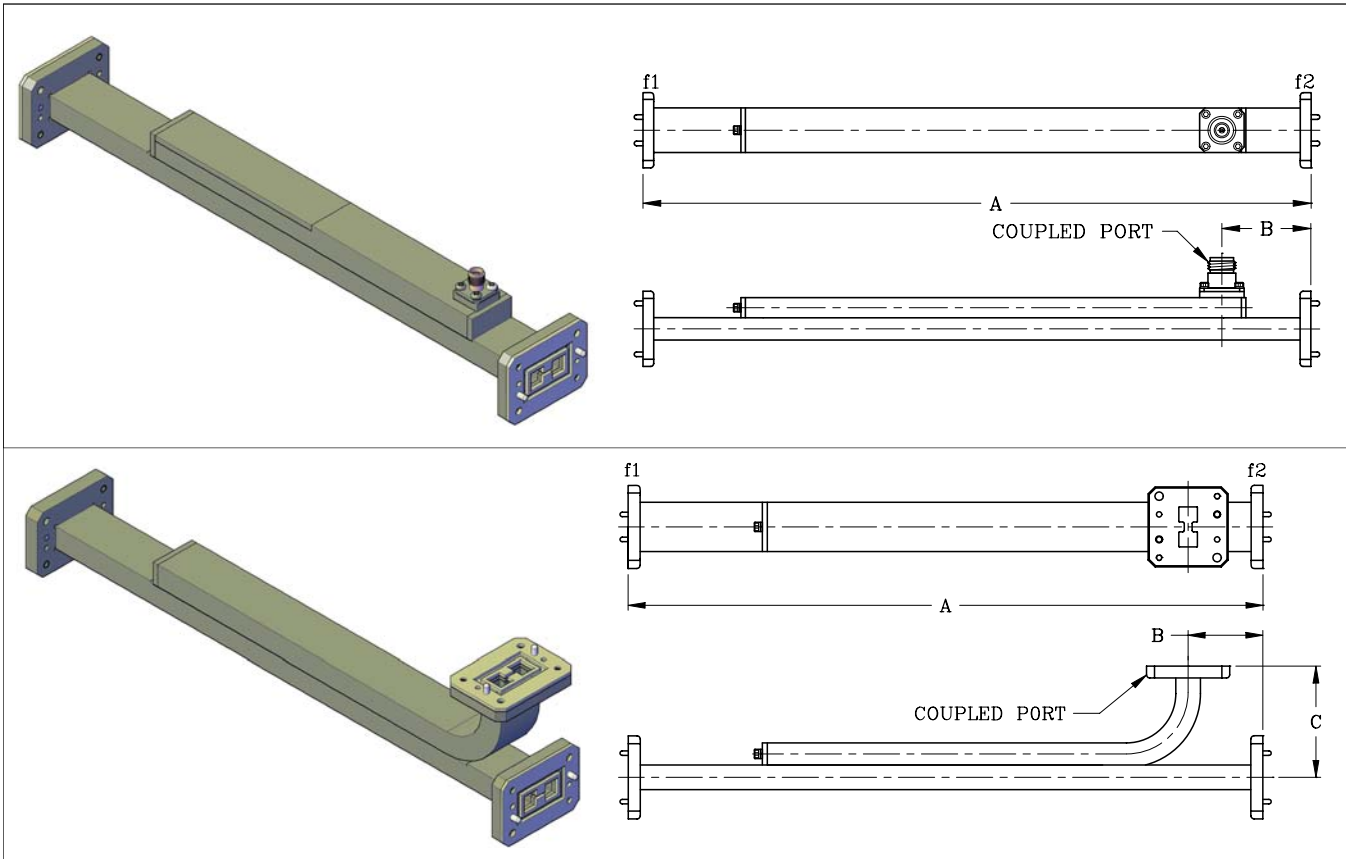


## Double Ridge Waveguide Topwall Couplers



Space Machine custom fabricates a standard product line of double ridge topwall couplers covering waveguide sizes WRD180 thru WRD200. Coupling variation is typically  $\pm 2$ dB over the full waveguide band. Directivity is 20dB minimum. Additional sizes and configurations are available upon request. See next page for standard dimensions.

### Ordering Information:

**Double Ridge Topwall Coupler,  
WRD500, Aluminum, 30dB Coupling,  
Type N Female Coupled Port, Gasket Flanges,  
Chromated, Paint Space Machine Gray.**

Example part number:

<u>DRT</u>	<u>wrd</u>	<u>-m</u>	<u>c</u>	<u>cp</u>	<u>-f1</u>	<u>f2</u>	<u>-p</u>	<u>f</u>
DRT	500	-A	30	NF	-02	02	-C	P

Series (DRT):

Waveguide Size (wrd): WRD180 thru WRD200

Material (-m): A – Aluminum

Coupling (c): 20 - 60 dB

Coupled Port (cp): Connector – See [Appendix E](#),  
Flange – See [Appendix H](#)

Flange (-f1 f2): See [Appendix H](#)

Plating (-p): C – Chromate, S – Silver, G – Gold, O – Other, N – None

Finish (f): P – Paint Space Machine Gray, N – None, O – Other

## *Double Ridge Waveguide Topwall Coupler Dimensions*

<b>Model</b>	<b>WRD #</b>	<b>Frequency (GHz)</b>	<b>A</b>	<b>B</b>	<b>C</b>
DRT180-	180	18.00 - 40.00	12.00	1.30	1.40
DRT110-	110	11.00 - 26.50	16.00	1.30	1.70
DRT750-	750	7.50 - 18.00	22.00	1.60	2.00
DRT650-	650	6.50 - 18.00	22.00	1.60	2.00
DRT580-	580	5.80 - 16.00	22.00	1.60	2.00
DRT500-	500	5.00 - 18.00	22.00	1.60	2.00
DRT475-	475	4.75 - 11.00	32.00	1.80	2.40
DRT350-	350	3.50 - 8.20	35.00	2.00	2.70
DRT250-	250	2.60 - 7.80	40.00	2.20	3.00
DRT200-	200	2.00 - 4.80	40.00	2.75	5.00

All dimensions are in inches.