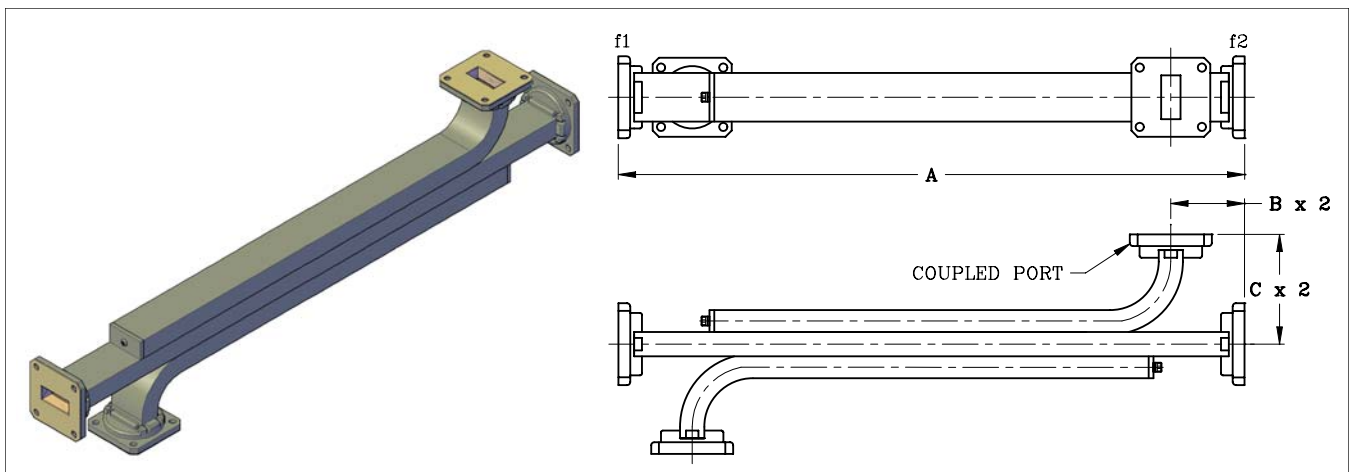
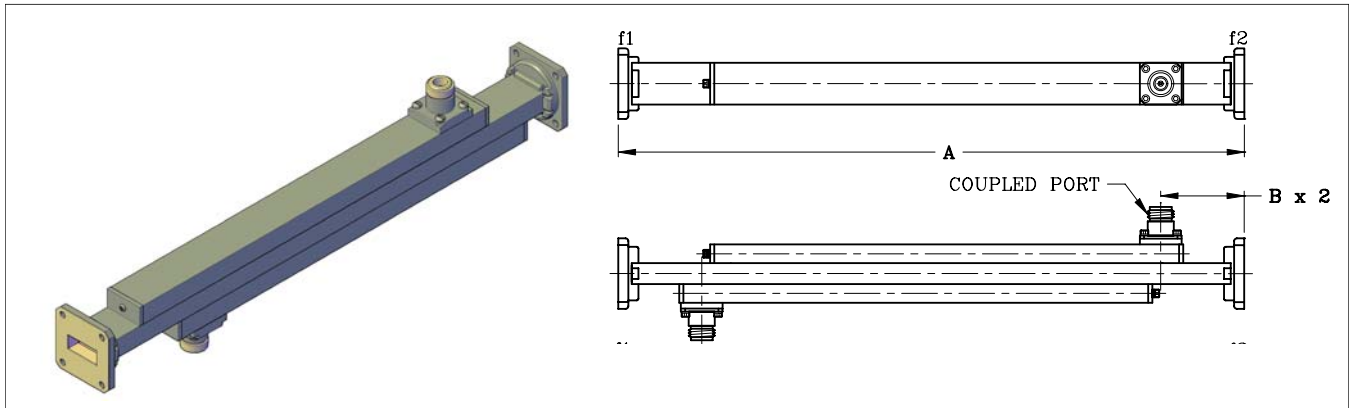


Space Machine & Engineering CORP.

Rectangular Waveguide Dual Topwall Couplers



Space Machine custom fabricates a standard product line of dual topwall couplers covering waveguide sizes WR28 thru WR284. Coupling variation is typically $\pm 0.5\text{dB}$ over the full waveguide band. Directivity is 35dB minimum. Additional sizes and configurations are available upon request. See next page for standard dimensions.

Ordering Information:

Dual Topwall Coupler, WR112, Bronze, 30dB Coupling, Type N Female Coupled Port, Cover / Choke Flanges, Chromated, Paint Space Machine Gray.

Example part number:

DBC	wr	-m	c	cp	-f1	f2	-p	f
DBC	112	-B	30	NF	-01	02	-C	P

Series (DBC):

Waveguide Size (wr): WR28 thru WR284

Material (-m): A – Aluminum, B – Bronze, O – Other

Coupling (c): 10 – 40 dB

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

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

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

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

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Rectangular Waveguide Dual Top Wall Coupler Dimensions

Model	WR #	Frequency (GHz)	A	B	C
DBC28-	28	26.50 - 40.00	12.25	1.00	1.50
DBC34-	34	22.00 - 33.00	14.25	1.00	1.50
DBC42-	42	18.00 - 26.50	14.75	1.00	1.63
DBC51-	51	15.00 - 22.00	16.25	1.20	2.25
DBC62-	62	12.40 - 18.00	18.25	1.20	2.25
DBC75-	75	10.00 - 15.00	20.25	1.20	2.25
DBC90-	90	8.20 - 12.40	22.25	1.50	2.25
DBC102-	102	7.00 - 11.00	23.25	1.50	3.25
DBC112-	112	7.05 - 10.00	24.25	1.50	3.25
DBC137-	137	5.85 - 8.20	28.25	1.70	3.25
DBC159-	159	4.90 - 7.05	32.25	2.00	4.25
DBC187-	187	3.95 - 5.85	36.25	2.20	4.50
DBC229-	229	3.30 - 4.90	48.25	2.20	5.25
DBC284-	284	2.60 - 3.95	60.25	2.70	6.75

All dimensions are in inches.