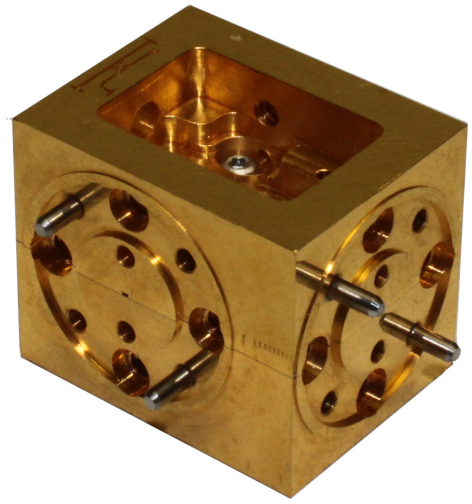
FLANN MICROWAVE

Millimetric Multihole Directional Coupler
Series 136 - High Directivity
Series 137 - Very High Directivity

- **Models 33 GHz to 500 GHz**
- **Up to 40 dB Directivity (Series 136)**
- **Up to 44 dB Directivity (Series 137)**
- **3 & 4 port models**



Model: 570137-03

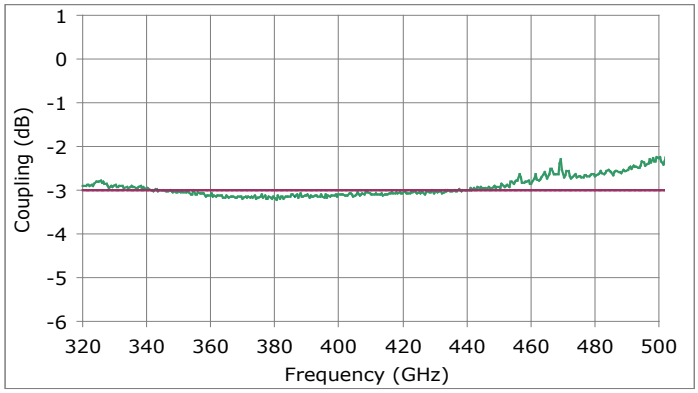
Flann Millimetric Directional Couplers utilise advanced micro machining techniques to yield high directivity and flat coupling up to 500 GHz.

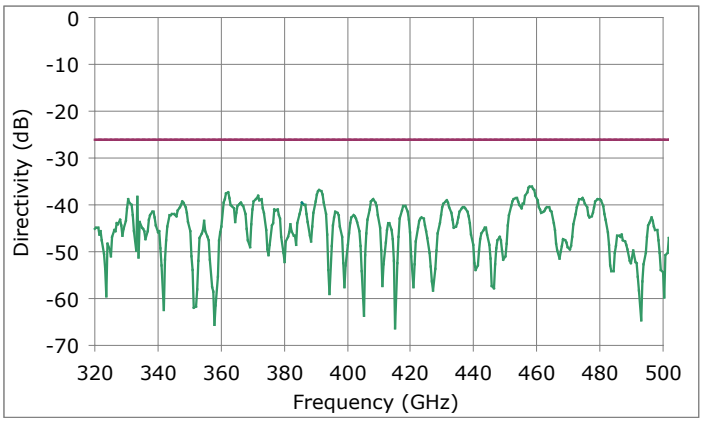
Two variants are available;

Series 136 - provides high directivity up to 40 dB and for more demanding applications.

Series 137 - offers very high directivity up to 44 dB depending on model - please see specifications.

Typical Coupling and Directivity for Model 570137-03





Related Products

Series

130/132/133:	High Directivity Multihole Couplers
131/132:	Double Ridge Couplers
140/230,231:	Branch Guide Couplers/ 3 Way Splitter
270:	Crossguide Coupler
300:	Dual Multihole Couplers/Reflectometers

Custom Design

Custom built instruments can be supplied; please contact the sales team for more information.

Ordering

Please specify the following:

WG Designation	Series	-	Coupling Value	Flange
23- 570	136/137		3dB, 10dB, 20dB	See flann.com

Example: 23137-03 UG-383/U. A WG23 (WR22) Multihole Coupler with 3dB coupling and a UG-383/U flange.

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Millimetric Multihole Directional Coupler
Series 136 & Series 137

Microwave Specifications

WG Designation				Frequency Range (GHz)	Minimum Directivity (dB)		Coupling				Additional Primary Arm Loss (dB)	Primary Arm VSWR	Secondary Arm VSWR
WM*	WG	R	WR		Series 136	Series 137	Sensitivity (±dB)	Nominal Accuracy (±dB)					
								3 - 6	10	20 - 60			
-	23	400	22	33.0 - 50.1	40	44	0.75	0.5	0.75	1.2	0.6	1.06	1.10
-	24	500	19	39.3 - 59.7	38	42	0.75	0.5	0.75	1.2	0.7	1.06	1.10
-	25	620	15	49.9 - 75.8	38	42	0.75	0.5	0.75	1.2	0.8	1.06	1.10
-	26	740	12	60.5 - 92.0	38	42	1.00	0.5	0.75	1.5	1.0	1.08	1.10
2540	27	900	10	73.8 - 112	36	40	1.00	0.75	1.0	1.5	1.1	1.08	1.10
2032	28	1200	8	92.3 - 140	34	38	1.00	0.75	1.0	1.5	1.3	1.12	1.15
1651	29	1400	6	114 - 173	32	36	1.00	0.75	1.0	1.5	1.4	1.12	1.20
1295	30	1800	5	145 - 220	30	34	1.00	0.85	1.2	2.0	1.6	1.12	1.25
1092	31	2200	4	172 - 261	28	32	1.20	0.85	1.2	2.0	1.8	1.15	1.30
864	32	2600	3	220 - 330	26	30	1.20	0.85	1.2	2.0	2.0	1.20	1.40
710	-	-	2.8†	260 - 400	24	28	1.50	1.0	1.5	2.5	2.2	1.30	1.60
570	-	-	2.2†	330 - 500	22	26	1.50	1.0	1.5	2.5	2.6	1.40	2.00

WM* - IEEE Standard for Rectangular Metallic Waveguides and Their Interfaces for Frequencies of 110 GHz and Above.

Environmental Specifications

Optimum operating temperature: 5°C to 35°C
Wider temperature ranges available - details on request

Options

Standard coupling values 3dB, 10dB and 20dB
Coupling values up to 60dB can also be supplied

† Waveguide designation not formally standardised.

* IEEE 1785.1 - IEEE Standard for Rectangular Metallic Waveguide and Their Interfaces for Frequencies of 110 GHz and Above (2012)

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