

Air Dielectric Directional Couplers Low Loss, Octave Bandwidth

Rev. V2

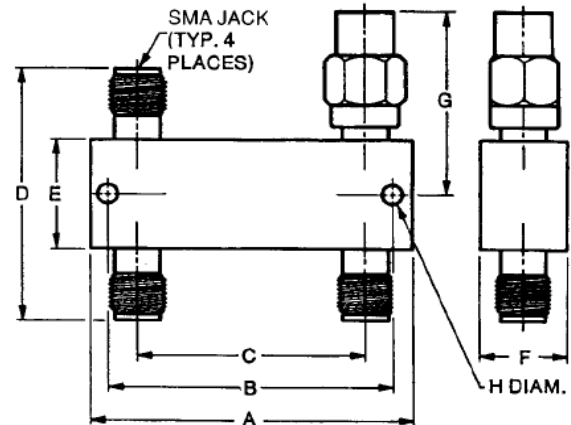
Features

- Air Dielectric for Low Loss
- Frequency Range: 1.0 to 18 GHz
- Octave Bandwidths
- Meets MIL-E-5400 Environments

Description

These directional couplers feature compact packaging and four-port construction. This combination permits flexibility in system designs. They are intended for test and measurement setups as well as for system use. Temperature range is -54° to $+110^{\circ}\text{C}$. These units incorporate three miniature, low VSWR SMA jack connectors. Isolated port is terminated with 1/2 watt, 50 ohm load.

Outline Drawing



NOTE: All dimensions are $\pm .020$, except mounting hole diameters ($\pm .005$) and mounting hole location ($\pm .010$).

Mechanical Specifications

Case Style	A Inch (mm)	B Inch (mm)	C Inch (mm)	D Inch (mm)	E Inch (mm)	F Inch (mm)	G Inch (mm)	H Inch (mm)	Weight oz	Weight g
1	2.55 (64.8)	2.39 (60.8)	1.97 (50.1)	1.16 (29.4)	0.50 (12.7)	0.38 (9.7)	0.91 (23.2)	0.093 (2.36)	1.90	54
2	1.69 (42.7)	1.52 (38.7)	1.11 (28.2)	1.16 (29.4)	0.50 (12.7)	0.38 (9.7)	0.91 (23.2)	0.093 (2.36)	1.10	31
3	1.41 (35.6)	1.24 (31.5)	0.82 (20.8)	1.16 (29.4)	0.50 (12.7)	0.38 (9.7)	0.91 (23.2)	0.093 (2.36)	1.07	31
4	1.19 (30.0)	1.02 (26.0)	0.60 (15.2)	1.16 (29.4)	0.50 (12.7)	0.38 (9.7)	0.91 (23.2)	0.093 (2.36)	0.98	28
5	1.08 (27.4)	0.92 (23.4)	0.50 (12.7)	1.28 (32.6)	0.63 (15.9)	0.38 (9.7)	0.97 (24.6)	0.093 (2.36)	1.01	30

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Specifications

Part Number	Case Style	Freq. Range (GHz)	Coupling (Include. Freq. Sens.(dB)	Freq. Sens. (dB)	Insertion Loss Max (dB)	Direct. Min. (dB)	VSWR Max Prim Line	Power Avg. (W)	Power Pk. (kW)	M/A-COM MIL-C-15370/10* Commercial Equivalent Part No.
2023-6121-06 2023-6122-10 2023-6123-20	1 1 1	1.0-2.0	6 ± 1.0 10 ± 1.0 20 ± 1.0	±0.50 ±0.75 ±1.0	0.20 0.20 0.20	20 20 20	1.20 1.20 1.20	2 5 50	2 2 2	2023-4011-06 2023-4012-10 2023-4013-20
2023-6125-10 2023-6126-20	2 2	2.0-4.0	10 ± 1.0 20 ± 1.0	±0.75 ±1.0	0.20 0.20	20 20	1.20 1.20	5 50	2 2	— —
2023-6127-06 2023-6128-10 2023-6129-20	3 3 3	2.6-5.2	6 ± 1.0 10 ± 1.0 20 ± 1.0	±0.60 ±0.75 ±1.0	0.20 0.20 0.20	18 18 18	1.25 1.25 1.25	2 5 50	2 2 2	— — —
2023-6133-06 2023-6134-10 2023-6135-20	5 5 5	8.0-12.4	6 ± 1.0 10 ± 1.0 20 ± 1.0	±0.50 ±0.75 ±1.0	0.25 0.25 0.25	15 15 15	1.30 1.30 1.30	2 5 50	2 2 2	— 2023-4016-10 2023-4017-20
2023-6136-06 2023-6137-10 2023-6138-20	5 5 5	12.4-18.0	6 ± 0.75 10 ± 0.75 20 ± 0.75	±0.60 ±0.75 ±1.0	0.25 0.25 0.25	12 12 12	1.35 1.35 1.35	2 5 50	2 2 2	2023-4085-06 — —