

Directional Couplers, Ultra-Broadband

Rev. V3

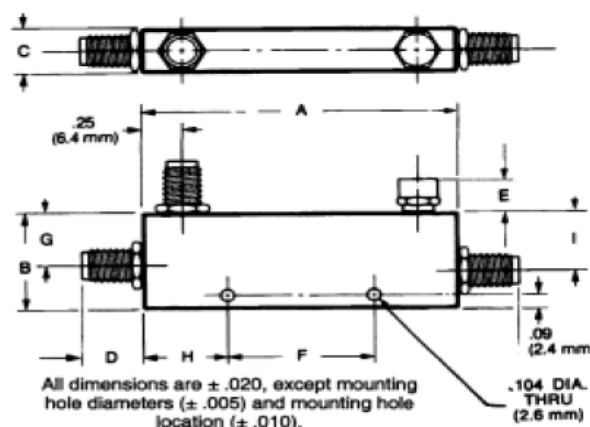
Features

- Frequency Range: 0.5 - 18 GHz
- Standard Coupling Values: 10 and 20 dB
- Temperature Range: -54°C to +125°C
- Connectors: SMA per MIL-C-39012
- Isolated Port with Non-Removable 50 Ohm Termination

Description

These compact broad band couplers operate over frequency bandwidths of 12 to 1 up to 36 to 1. Each coupler is constructed in a rugged aluminum housing with Stripline circuitry. The input, output and coupled output ports are stainless steel SMA connectors. The isolated port is terminated with a non-removable precision 50 ohm termination. Custom variations of these designs to specific requirements can also be produced.

Outline Drawing



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 (Input) Avg. In. (w)	Power (Input) Avg. Ref(W)	Power (Input) Pk. (kW)
2026-6001-10	1	1.0 - 12.4	10 ± 1.0	± 0.4	$0.35 + 0.04f\text{GHz}$	18 ¹	1.30	50	10	3
2026-6003-20	1	1.0 - 12.4	20 ± 1.0	± 0.6	$0.35 + 0.04f\text{GHz}$	17	1.30	50	50	3
2026-6004-10	2	2.0 - 18.0	10 ± 1.0	± 0.5	$0.30 + 0.03f\text{GHz}$	15 ²	1.35	50	10	3
2026-6006-20	2	2.0 - 18.0	20 ± 1.0	± 0.5	$0.30 + 0.03f\text{GHz}$	18 ³	1.35	50	50	3
2026-6007-10	1	1.0 - 18.0	10 ± 1.0^4	± 0.5	$0.30 + 0.05f\text{GHz}$	15 ²	1.40	50	10	3
2026-6009-20	1	1.0 - 18.0	20 ± 1.0	± 0.6	$0.30 + 0.05f\text{GHz}$	17 ³	1.40	50	50	3
2026-6010-10	3	0.5 - 18.0	10 ± 1.0	± 1.0	$0.90 + 0.03f\text{GHz}$	15 ²	1.50	50	10	3
2026-6012-20	3	0.5 - 18.0	20 ± 1.0	± 1.0	$0.90 + 0.03f\text{GHz}$	15	1.50	50	50	3

Mechanical Specifications

1. 15 dB from 8.0 to 12.4 GHz 3. 15 dB from 12.4 to 18 GHz
2. 12 dB from 12.4 to 18 GHz 4. -1.5 to 1.0 from 0.5 to 2 GHz only

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)	I Inch (mm)	Weight oz	Weight g
1	3.8 (97)	0.69 (17.5)	0.38 (9.7)	0.38 (9.7)	0.25 (6.4)	2.31 (58.7)	0.39 (9.9)	0.75 (19)	0.44 (11.1)	2.0	56
2	2.0 (50.8)	0.69 (17.5)	0.38 (9.7)	0.38 (9.7)	0.25 (6.4)	0.95 (24.2)	0.38 (9.7)	0.53 (13.5)	0.42 (10.7)	1.3	37
3	4.4 (111.8)	0.73 (18.5)	0.38 (9.7)	0.38 (9.7)	0.25 (6.4)	2.90 (73.7)	0.48 (12.2)	0.75 (19)	0.48 (12.2)	2.5	71

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