

Directional Couplers Ultra-Broadband

Rev. V4

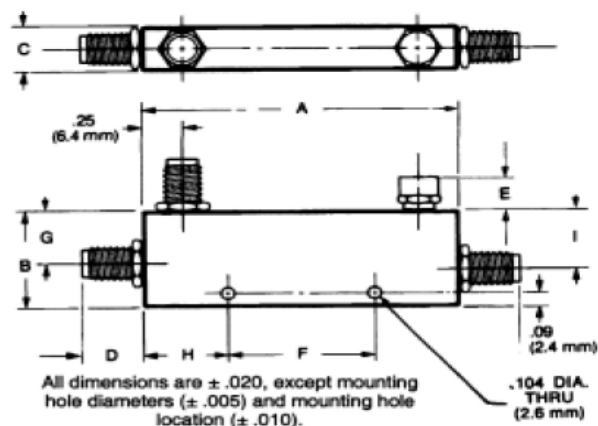
Features

- 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 \pm 1.0	\pm 0.4	0.35 + 0.04fGHz	18 ¹	1.30	50	10	3
2026-6003-20	1	1.0 - 12.4	20 \pm 1.0	\pm 0.6	0.35 + 0.04fGHz	17	1.30	50	50	3
2026-6004-10	2	2.0 - 18.0	10 \pm 1.0	\pm 0.5	0.30 + 0.03fGHz	15 ²	1.35	50	10	3
2026-6007-10	1	1.0 - 18.0	10 \pm 1.0 ⁴	\pm 0.5	0.30 + 0.05fGHz	15 ²	1.40	50	10	3
2026-6009-20	1	1.0 - 18.0	20 \pm 1.0	\pm 0.6	0.30 + 0.05fGHz	17 ³	1.40	50	50	3
2026-6010-10	3	0.5 - 18.0	10 \pm 1.0	\pm 1.0	0.90 + 0.03fGHz	15 ²	1.50	50	10	3
2026-6012-20	3	0.5 - 18.0	20 \pm 1.0	\pm 1.0	0.90 + 0.03fGHz	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

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

M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.