

N Directional Coupler 6 dB 800 MHz to 2.5 GHz Rated to 60 Watts

Directional couplers are indispensable components for isolating, separating and combining signals. For example, they provide a simple way of sampling microwave signals. They also can make accurate attenuator measurements since reflections are eliminated. The SMC4037-06 is a 6 dB directional coupler that operates from 0.8 to 2.5 GHz with 20 dB directivity minimum and 1.25:1 VSWR maximum. The package interface uses N female connectors, and is also RoHS compliant.

The SMC4037-06 is part of Fairview Microwave's family of directional/dual-directional couplers that offer coupling ratio up to 50 dB with excellent performance featuring high directivity, low insertion loss and VSWR. They are available in both narrow and broad bandwidths and can be used in a wide variety of applications including signal sampling, VSWR measurements, power combining and distribution.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	0.8		2.5	GHz
Impedance		50		Ohms
Coupling		6 ±0.5		dB
Freq. Sensitivity			±0.7	dB
Directivity	20			dB
Main Line VSWR			1.25:1	
Input Power (CW)			60	Watts

Electrical Specification Notes:
 Values at 25°C, sea level.

Mechanical Specifications

Size

Length	4.13 in [104.9 mm]
Width/Dia.	0.83 in [21.08 mm]
Height	1.18 in [29.97 mm]
Weight	0.41315 lbs [187.4 g]

Configuration

Input Connector	N Female
Output Connector	N Female
Coupled Connectors	N Female

Environmental Specifications

Temperature

Operating Range	-20 to +70 deg C
Storage Range	-40 to +70 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:



Features:

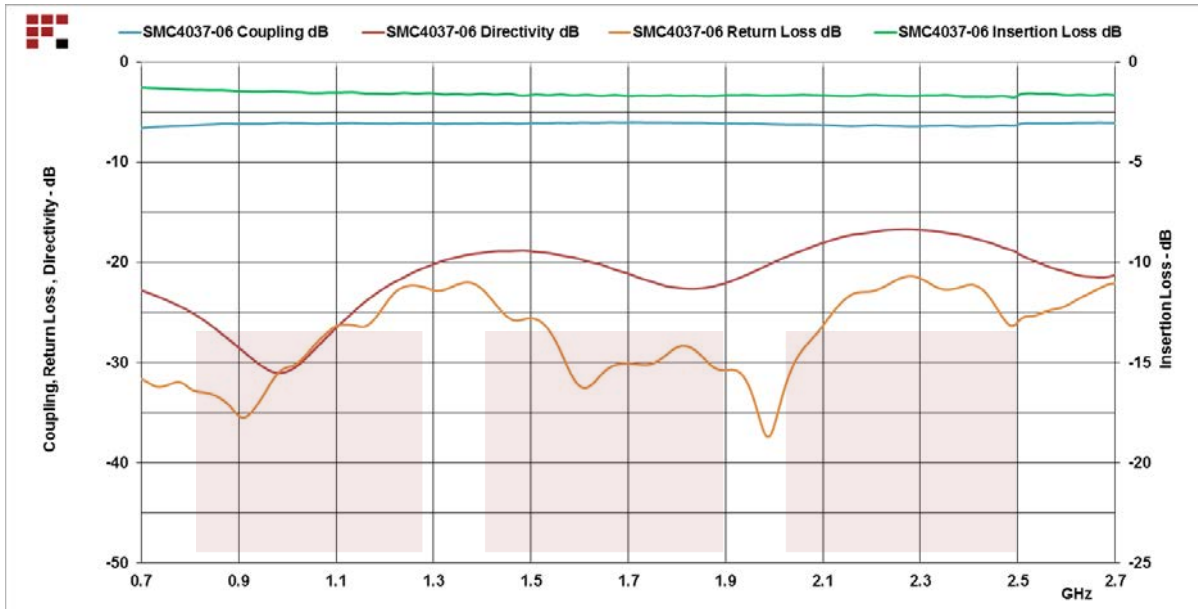
- Directional Coupler
- 0.8 to 2.5 GHz Frequency Range
- Coupling 6±0.8 dB
- Directivity > 20 dB
- VSWR < 1.25:1
- Max Power 60 Watts (CW)

Applications:

- Test and Measurement
- Military Communications
- Commercial Communications
- Wireless Communications
- SATCOM

Fairview Microwave
 301 Leora Ln., Suite 100
 Lewisville, TX 75056
 Tel: 1-800-715-4396 / (972) 649-6678
 Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Typical Performance Data



N Directional Coupler 6 dB 800 MHz to 2.5 GHz Rated to 60 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [N Directional Coupler 6 dB 800 MHz to 2.5 GHz Rated to 60 Watts SMC4037-06](https://www.fairviewmicrowave.com/n-directional-standard-6-db-2.5-ghz-smc4037-06-p.aspx)

URL: <https://www.fairviewmicrowave.com/n-directional-standard-6-db-2.5-ghz-smc4037-06-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/28/2020	S.PONG

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<p>Fairview Microwave an INFINIT[®] brand</p>	<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES: CABLE LENGTH (L) TOLERANCES:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">.X = ±.2 [5.08]</td> <td style="width: 33%;">FRACTIONS</td> <td style="width: 33%;">L ≤ 12 [305] = +1 [25] / -0</td> </tr> <tr> <td>.XX = ±.02 [.51]</td> <td>± 1/32</td> <td>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XXX = ±.005 [.13]</td> <td>ANGLES ± 1°</td> <td>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</td> </tr> <tr> <td></td> <td></td> <td>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td></td> <td></td> <td>300 [7620] < L = +5%L / -0</td> </tr> </table>	.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0	.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0			120 [3048] < L ≤ 300 [7620] = +6 [152] / -0			300 [7620] < L = +5%L / -0	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p>
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