

## N Directional Coupler 10 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 SMC4037-10 is a 10 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 SMC4037-10 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		10 ±0.8		dB
Freq. Sensitivity			±0.7	dB
Main Line Loss			0.5	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	0.434 lbs [196.86 g]

#### Configuration

Package Type	Connectorized
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



### Features:

- Directional Coupler
- 0.8 to 2.5 GHz Frequency Range
- Coupling 10±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

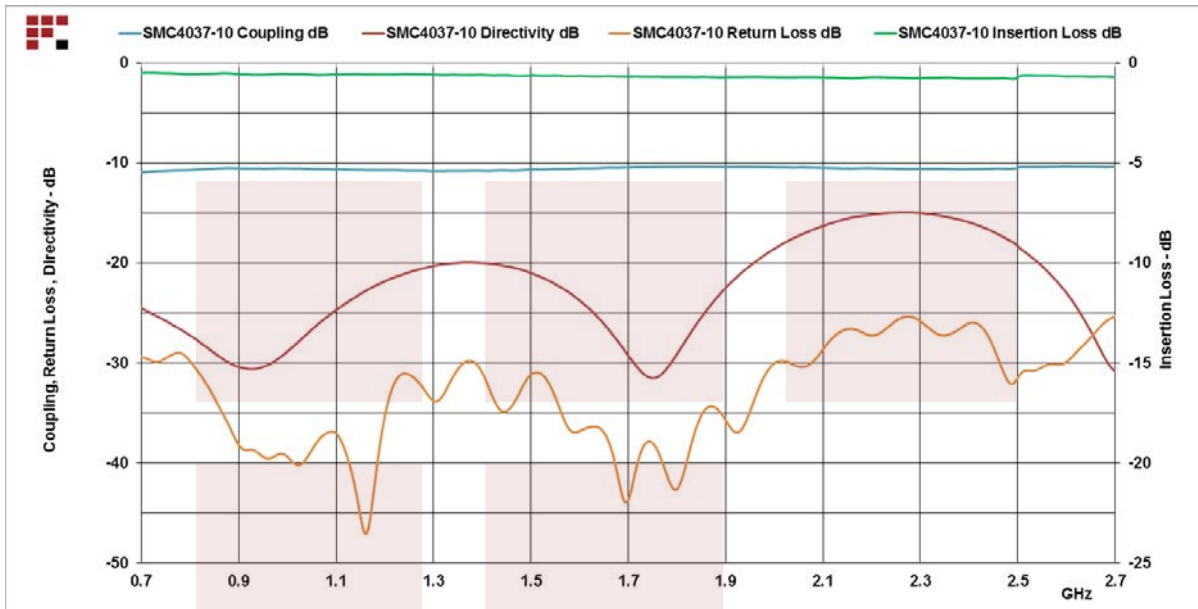
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**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**Typical Performance Data**

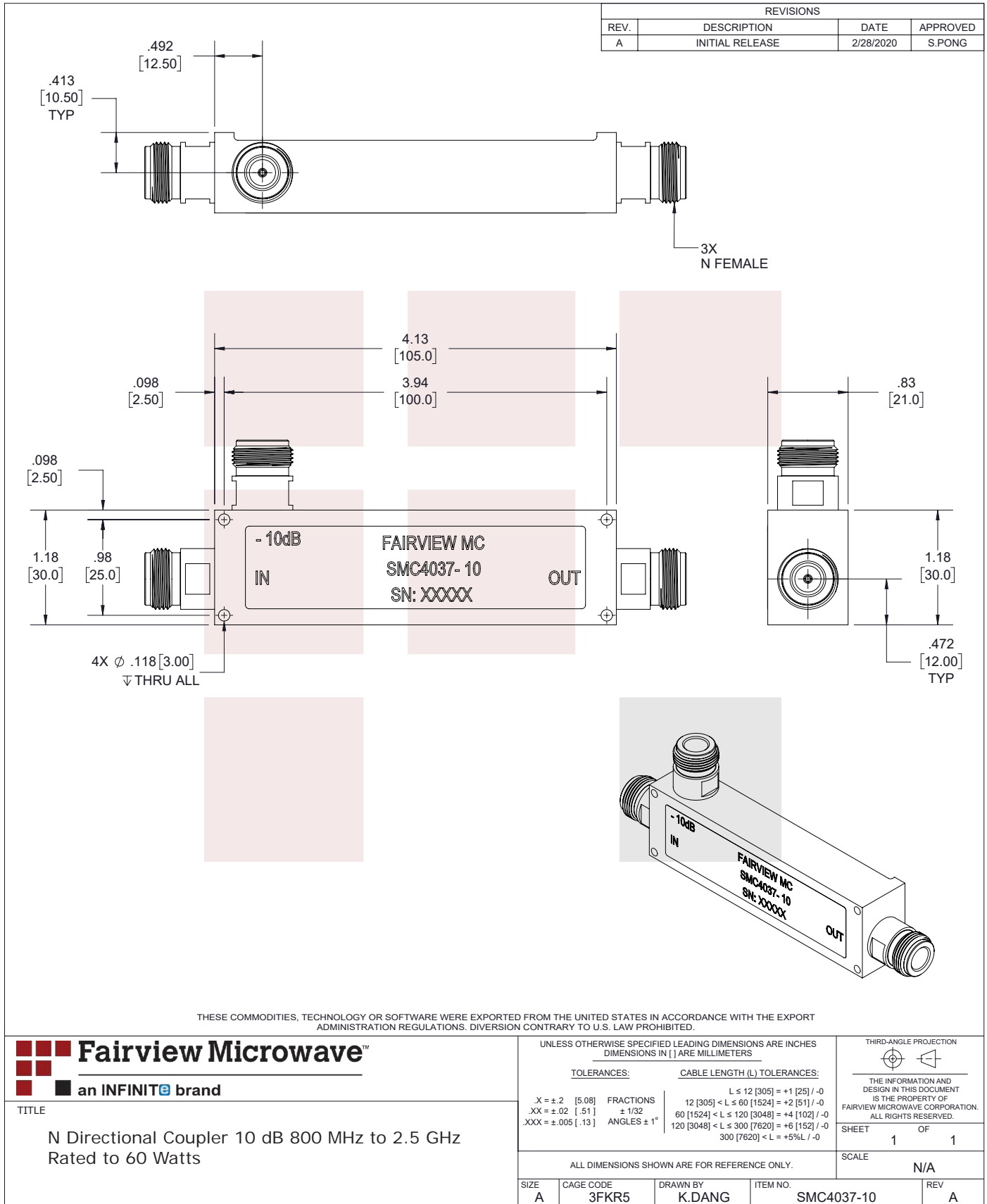


N Directional Coupler 10 dB 800 MHz to 2.5 GHz Rated to 60 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [N Directional Coupler 10 dB 800 MHz to 2.5 GHz Rated to 60 Watts SMC4037-10](#)

URL: <https://www.fairviewmicrowave.com/n-directional-standard-10-db-2.5-ghz-smc4037-10-p.aspx>

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