

SMA Directional Coupler 10 dB 2.2 GHz Rated to 50 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 MC2025A-10 is a 10 dB directional coupler that operates from 0.8 to 2.2 GHz with 18 dB directivity minimum and 1.25:1 VSWR maximum. The package interface uses SMA female connectors, and is also REACH and RoHS compliant.

The MC2025A-10 is part of Fairview Microwave's family of directional/dual-directional couplers that offer coupling ratios 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.



Features:

- Directional Coupler
- 0.8 to 2.2 GHz Frequency Range
- Coupling 10±1 dB
- Directivity > 18 dB
- VSWR < 1.25:1
- Max Power 50 Watts (CW)

Applications:

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

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	0.8		2.2	GHz
Impedance		50		Ohms
Coupling		10 ±1		dB
Main Line Loss		1		dB
Directivity	18			dB
Main Line VSWR			1.25:1	
Input Power (CW)			50	Watts

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

Mechanical Specifications

Housing Material and Plating Aluminum

Configuration

Package Type Connectorized
 Input Connector SMA Female
 Output Connector SMA Female
 Coupled Connectors SMA Female

Environmental Specifications

Temperature

Operating Range -30 to +85 deg C

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

Plotted and Other Data

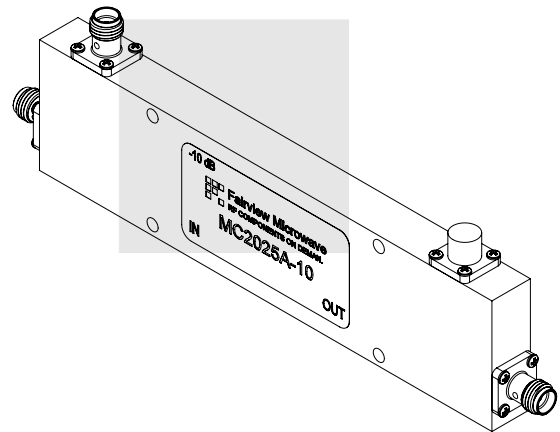
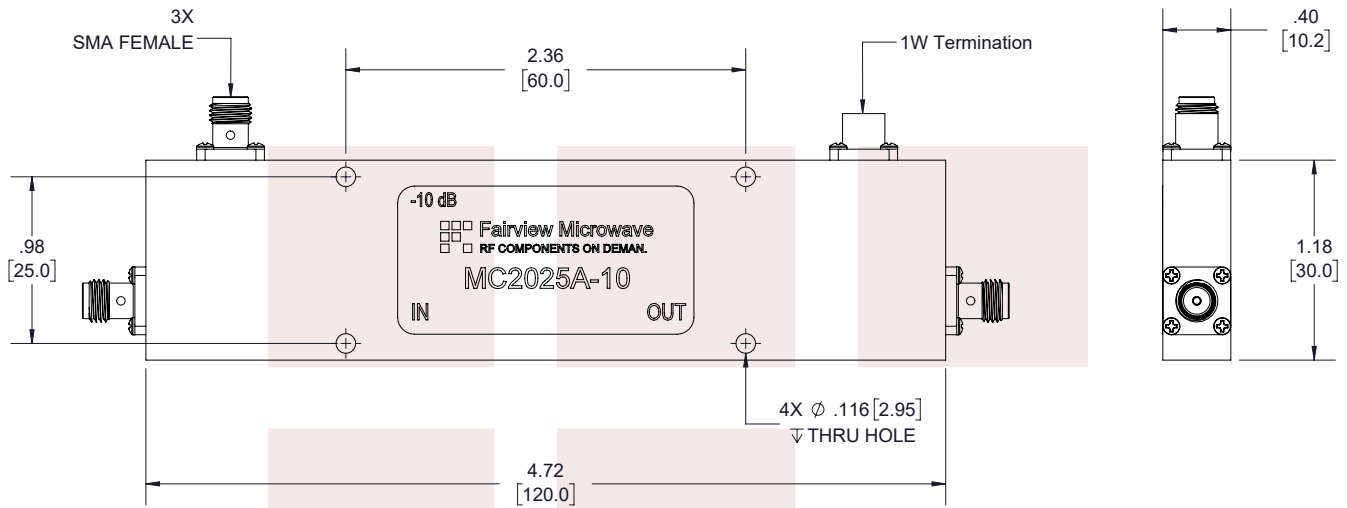
Notes:

SMA Directional Coupler 10 dB 2.2 GHz Rated to 50 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 Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Directional Coupler 10 dB 2.2 GHz Rated to 50 Watts MC2025A-10](#)

URL: <https://www.fairviewmicrowave.com/sma-directional-standard-10-db-2.2-ghz-mc2025a-10-p.aspx>

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STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].				
TITLE SMA Directional Coupler 10 dB 2.2 GHz Rated to 50 Watts		DWG NO MC2025A-10		CAGE CODE 3FKR5		
CAD FILE	07/10/18	SHEET	1 OF 1	SCALE	N/A	SIZE A 7361