

# MC2025-10 DATA SHEET

### SMA Directional Coupler 10 dB Coupled Port From 800 MHz to 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 MC2025-10 is a 10 dB directional coupler that operates from 0.8 to 2.2 GHz with 18 dB directivity minimum and 1.3:1 VSWR maximum. The package interface uses SMA female connectors, and is also REACH and RoHS compliant.

The MC2025-10 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.

#### **Electrical Specifications**

Description	Min	Тур	Max	Units
Frequency Range	0.8		2.2	GHz
Impedance		50		Ohms
Coupling		dB		
Main Line Loss		1		dB
Directivity	18			dB
Main Line VSWR			1.3:1	
Input Power (CW)			50	Watts

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

#### **Mechanical Specifications**

<b>Size</b> Length Width/Dia. Height	4.53 in [115.06 mm] 0.98 in [24.89 mm] 0.39 in [9.91 mm]
Weight	0.169 lbs [76.66 g]
Housing Material and Pl	lating Aluminum
<b>Configuration</b> Package Type Input Connector Output Connector Coupled Connectors	Connectorized SMA Female SMA Female SMA Female
<b>Environmental Specifi</b> <b>Temperature</b> Operating Range	<b>cations</b> -30 to +85 deg C
Compliance Certificati document) RoHS Compliant REACH Compliant	Yes 12/17/2015



### Features:

- Directional Coupler
- 0.8 to 2.2 GHz Frequency Range
- Coupling 10±1.5 dB
- Directivity > 18 dB
- VSWR < 1.3:1
- Max Power 50 Watts (CW)

## **Applications:**

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

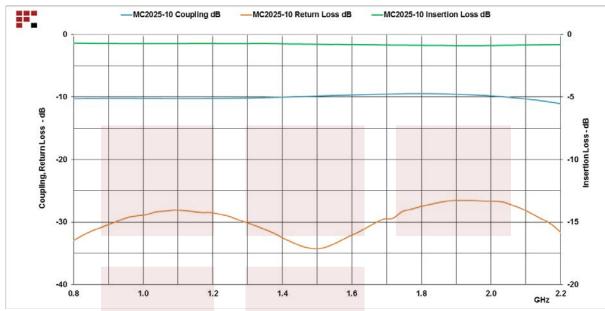
Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





#### **Plotted and Other Data**

Notes:



**Typical Performance Data** 

SMA Directional Coupler 10 dB Coupled Port From 800 MHz to 2.2 GHz Rated To 50 Watts from Fairview Microwave is instock 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 Coupled Port From 800 MHz to 2.2 GHz Rated To 50 Watts MC2025-10

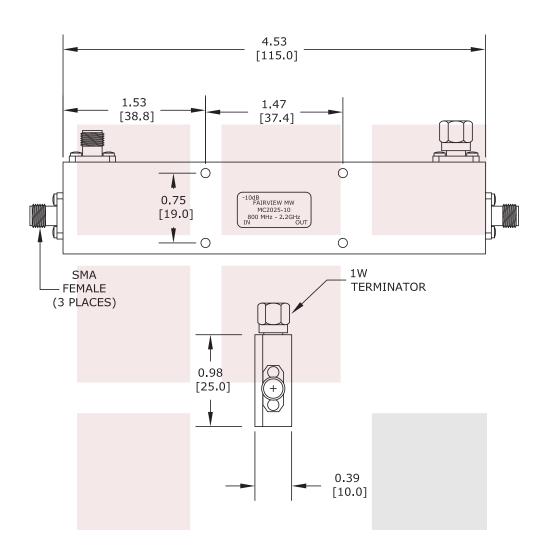
URL: https://www.fairviewmicrowave.com/sma-directional-coupler-10-db-2.2-ghz-mc2025-10-p.aspx

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STANDARD TOLERANCES

.X ±0.10 .XX ±0.05

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC.	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].						
SMA Directional Coupler 10 dB Coupled Port From 800	DWG NO MC2025-10			CAGE CODE 3FKR5			
MHz to 2.2 GHz Rated To 50 Watts	CAD FILE 041316	SHEET	SCALE	E N/A	SIZE A	3045	

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