

## SMA Directional Coupler 10 dB Coupled Port From 5 MHz to 1,000 MHz Rated To 1 Watts

This RF coupler from Fairview Microwave is just part of a wide selection of coaxial coupler products supplied for laboratory test and measurement, defense / military, antenna and other signal related uses. Our radio frequency coupler is directional and built with SMA ports. The Fairview Microwave directional coupler design uses SMA ports that have a gender of female and the impedance is 50 Ohm.

Directional coupler design for part number MC51008-10 from Fairview Microwave is rated for a 5 MHz minimum frequency and a 1000 MHz maximum frequency. Our directional coupler is designed with a 10 dB coupling value and a directional dB coupler directivity. This female SMA directional coupler is rated for a 0 dB maximum insertion loss and a 1 watts maximum input power.

Fairview is where to buy a directional coupler with SMA that is rated for a 0 dB maximum insertion loss and a 1.5 maximum VSWR. More female SMA coupler specs for this radio frequency component can be found on its directional coupler PDF specifications datasheet above. MC51008-10 directional 10 dB SMA coupler is part of over a million RF, microwave and millimeter wave components supplied by Fairview and this component can be bought and then shipped worldwide the same-day as with Fairview Microwave's other in-stock RF parts.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	5		1,000	MHz
Impedance		50		Ohms
Coupling		10 ±0.5		dB
Freq. Sensitivity			±0.5	dB
Main Line Loss			1.6	dB
Directivity	23			dB
Main Line VSWR			1.3:1	
Input Power (CW)			1	Watt

### Mechanical Specifications

#### Size

Length	0.9 in [22.86 mm]
Width/Dia.	0.9 in [22.86 mm]
Height	0.5 in [12.7 mm]
Weight	0.0575 lbs [26.08 g]

#### Configuration

Input Connector	SMA Female
Output Connector	SMA Female
Coupled Connectors	SMA Female

### Environmental Specifications

#### Temperature

Operating Range	+80 to -25 deg C
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### Features:

- Directional Coupler
- 5 MHz to 1,000 MHz Frequency Range
- Coupling 10±0.5 dB
- Directivity > 23 dB
- Max Power 1W (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:

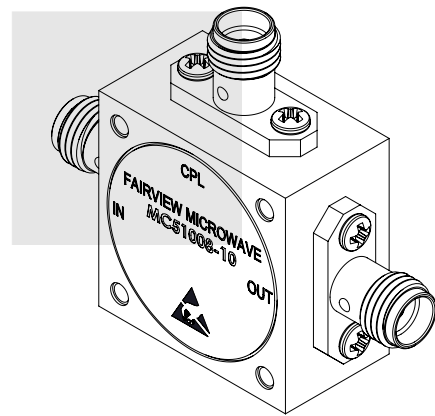
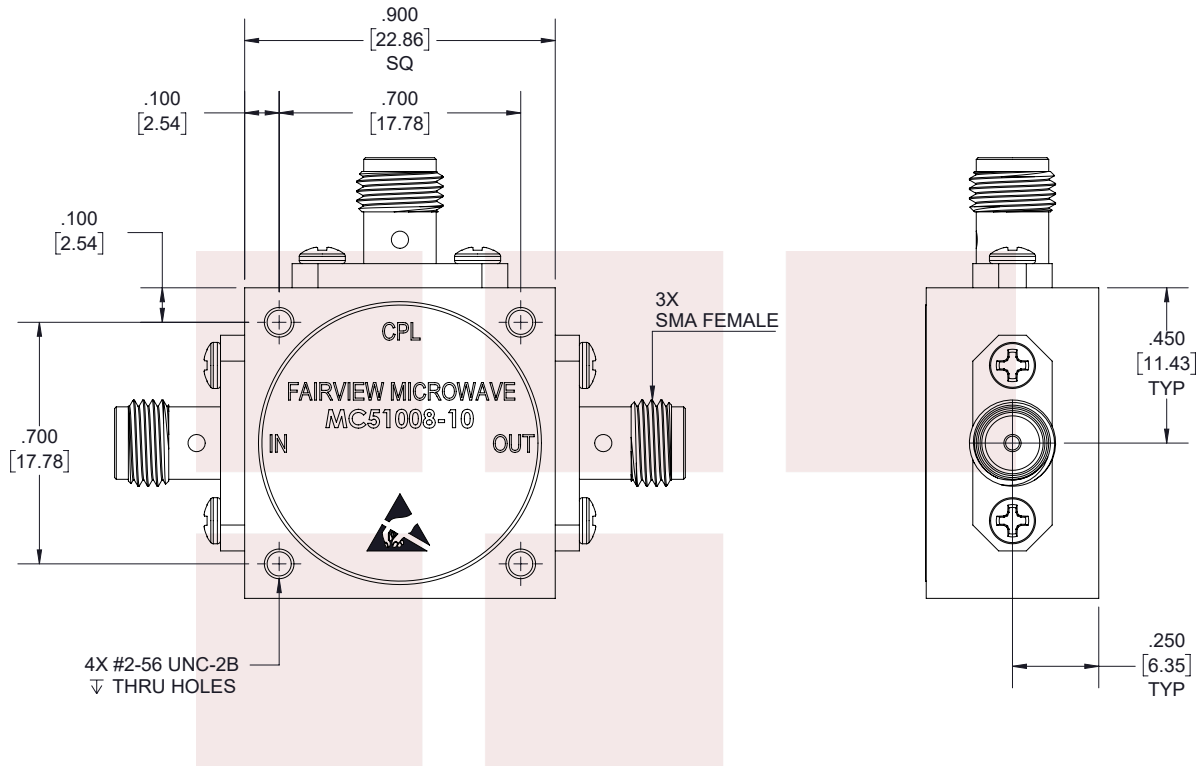
SMA Directional Coupler 10 dB Coupled Port From 5 MHz to 1,000 MHz Rated To 1 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Directional Coupler 10 dB Coupled Port From 5 MHz to 1,000 MHz Rated To 1 Watts MC51008-10](#)

URL: <https://www.fairviewmicrowave.com/sma-directional-coupler-10-db-1000-mhz-2-watts-mc51008-10-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	4/30/2020	S.PONG



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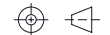
TITLE  
SMA Directional Coupler 10 dB Coupled Port From 5 MHz to 1,000 MHz Rated To 1 Watts

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.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

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. MC51008-10	REV A
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T-Rev.D