Fairview Microwave
an INFINITE brand

FMCP1100
DATA SHEET

SMA Directional Coupler 6 dB 4 GHz to 18 GHz Rated to 50 Watts

The FMCP1100 is an 6 dB RF coupler with 50 ohm SMA connectors operating from 4 to 18 GHz with a maximum input power of 50 Watts CW, and peak power handling of 0.3 kilowatt. The FMCP1100 has a coupling factor of 1 dB, insertion loss of (excluding coupled power) and a maximum VSWR of 1.5:1.The coupler operates over a temperature range of -45° to 85° C and meets environmental standard for humidity, shock, vibration, and altitude. Couplers have many Applications and perform several functions within the RF/Microwave industry such as circuit feedback and signal sampling for measurement or monitoring.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	4		18	GHz
Impedance		50		Ohms
Coupling	5.5	6	7	dB
Freq. Sensitivity		±0.5	±0.7	dB
Insertion Loss			0.5	dB
Directivity	12	14		dB
Main Line VSWR		1.4:1	1.5:1	
Input Power (CW)			50	Watts
Input Power (Peak)			300	Watts

Mechanical Specifications

Size

Length	1.3 in [33.02 mm]
Width/Dia.	0.43 in [10.92 mm]
Height	0.59 in [14.99 mm]
Weight	0.064 lbs [29.03 g]
Finish	Gray
Housing Material and Plating	Aluminum

Configuration

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

Environmental Specifications

Temperature

Operating Range	-45 to +85 deg C
Storage Range	-55 to +125 deg C
Humidity	100% RH at 35°C, 95% RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)

Features:

- 4 to 18 GHz
- 50 Watts CW Max Power
- 6 dB Coupling Value
- Directional SMA Coupler
- Meets Standards for Humidity, Shock, Vibration, Altitude

Applications:

- Communications Systems
- CDMA, GSM, LTE
- Amplifier Systems
- Amplifier Power Dividing
- Aviation/Aerospace
- Defense Applications
- Wireless Telecommunications

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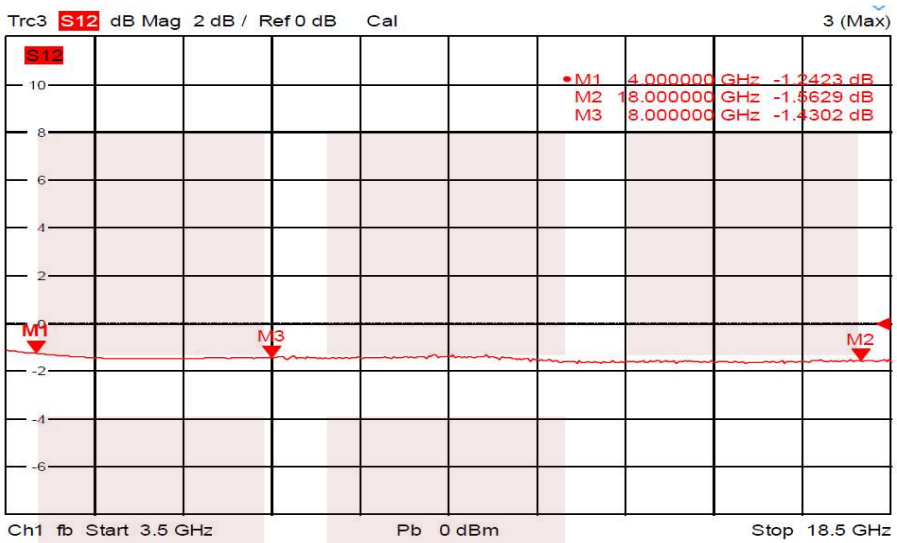
Compliance Certifications (see product page for current document)

Plotted and Other Data

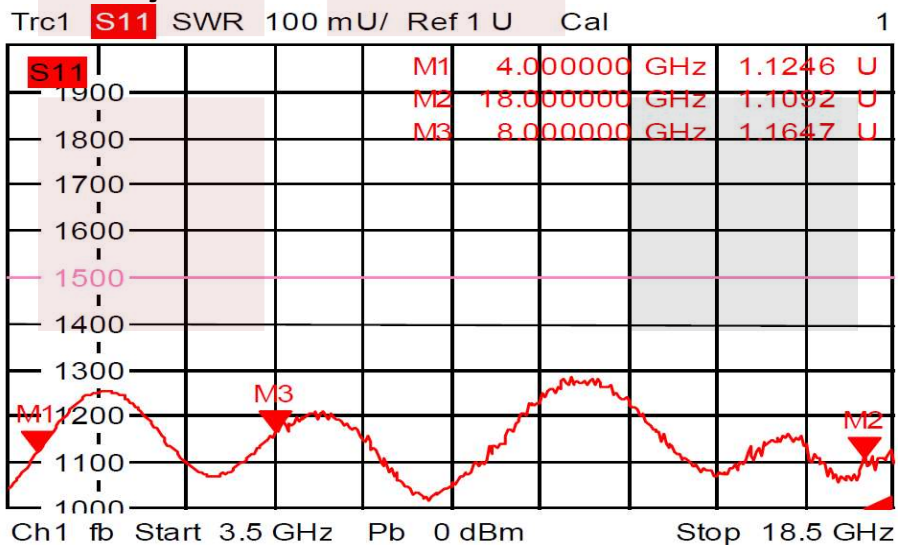
Notes:

Typical Performance Data

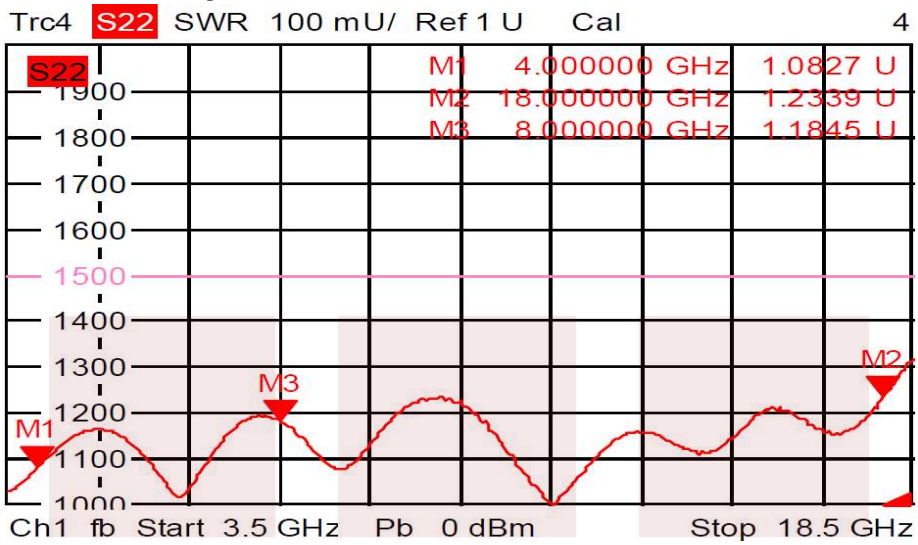
Insertion Loss



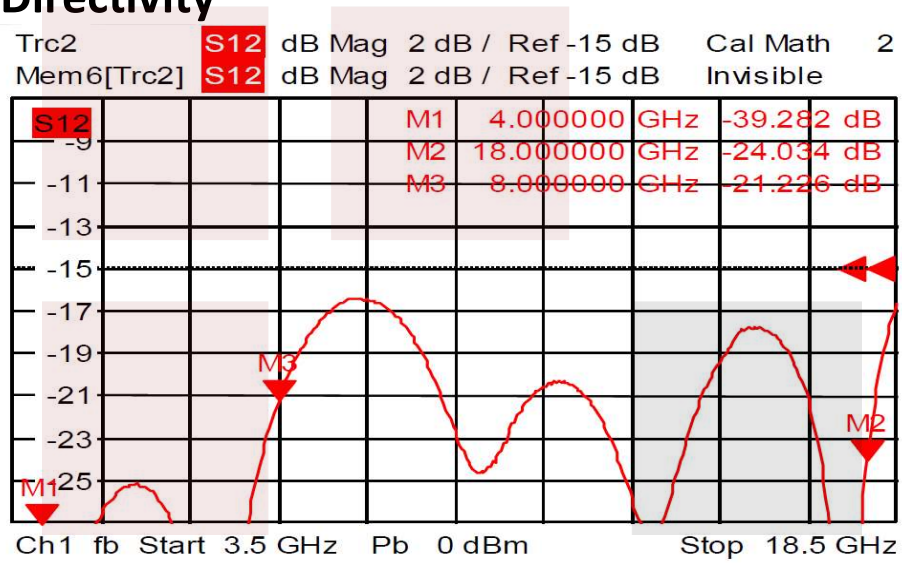
Primary VSWR



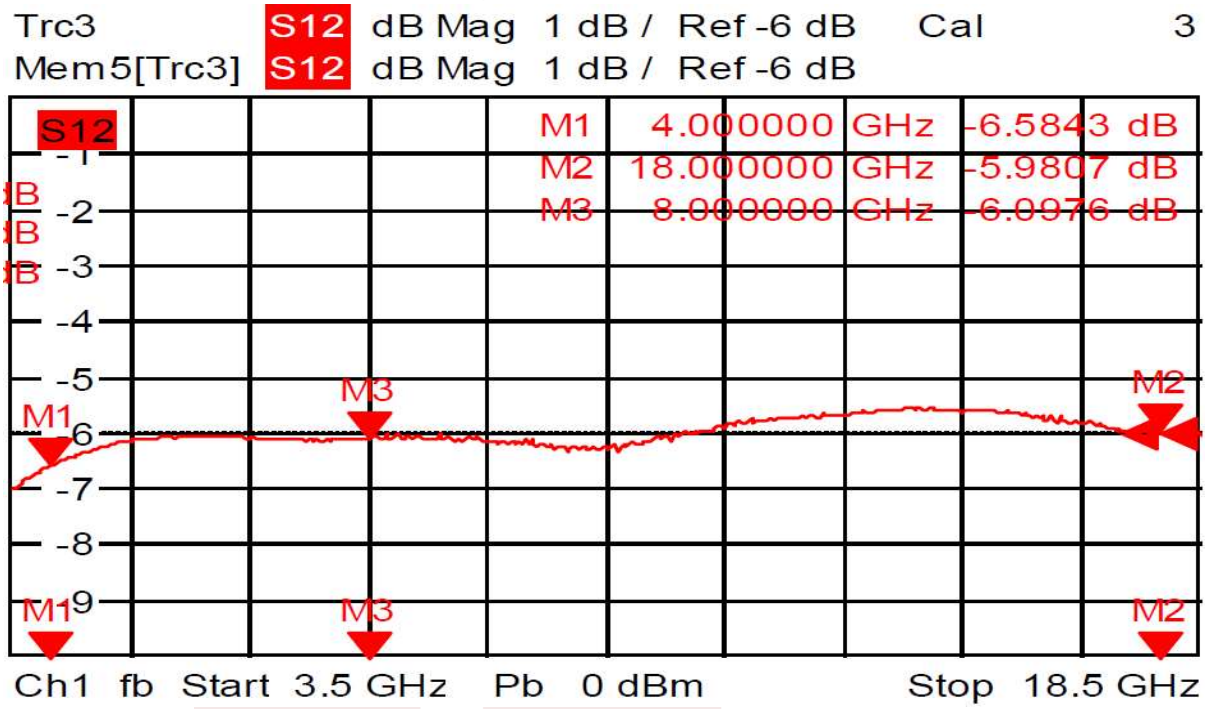
Secondary VSWR



Directivity



Nominal Coupling

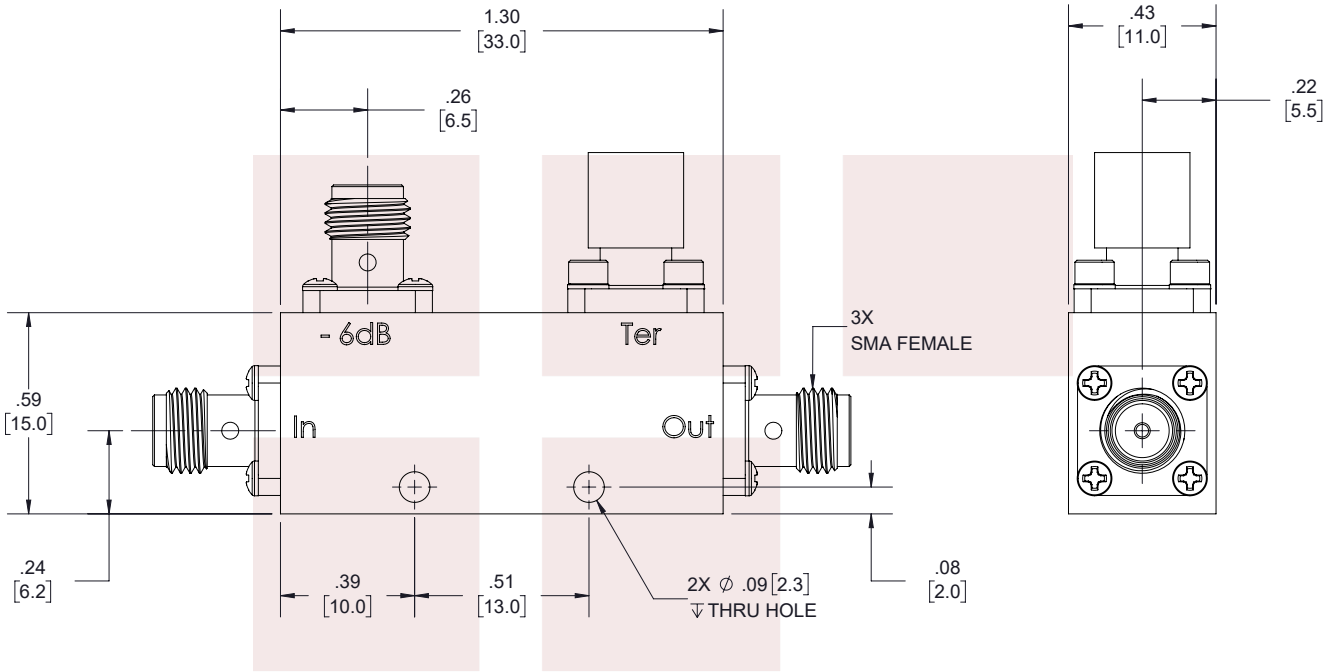


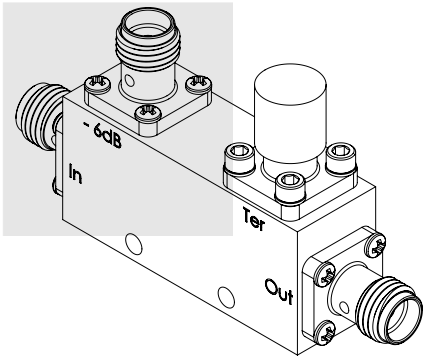
SMA Directional Coupler 6 dB 4 GHz to 18 GHz Rated to 50 Watts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: SMA Directional Coupler 6 dB 4 GHz to 18 GHz Rated to 50 Watts FMCP1100

URL: https://www.fairviewmicrowave.com/sma-directional-standard-6-db-18-ghz-fmcp1100-p.aspx

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	4/2/2020	S.PONG





LABEL:

FAIRVIEW MICROWAVE
FMCP1100
D/C: YYWW

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an INFINITE brand

TITLE

SMA Directional Coupler 6 dB 4 GHz to 18 GHz Rated to 50 Watts

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

TOLERANCES:

.X = ± .2 [5.08] FRACTIONS ± 1/32
.XX = ± .02 [.51] ANGLES ± 1°
.XXX = ± .005 [.13]

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	K.Dang	FMCP1100	A

T-Rev.D