

4 Way Broadband Combiner SMA Female Input and N-Type Female Output from 700 MHz to 6 GHz rated 300 Watts



**FMS0031**

**Features**

- 0.7 to 6 GHz Frequency
- 300 watt max power
- Insertion Loss: < 1.1 dB
- Phase Balance:  $\pm 7$  degrees
- Amplitude Balance:  $\pm 0.4$  dB
- Isolation: >6.5 dB
- High Power Handling Capability

**Applications**

- Communications Systems
- Power Combining
- PCS,GSM,LTE, Cellular
- Amplifier Systems
- Amplifier Power Combining
- Wireless Infrastructures
- Defense Applications

**Description**

FMS0031 is a passive 4 way High Power Broadband RF Combiner with 50 ohm SMA and N-Type connectors operating from 0.7 to 6 GHz, with max power at 300 watts. The FMS0031 has greater than 6.5 dB typical isolation, less than 1.1 dB typical low insertion loss and a Max VSWR of 1.35:1; along with a phase balance of  $\pm 7$  degrees and an amplitude balance of  $\pm 0.4$  dB. The RF Combiner operates in a temperature range from -55°C to 85°C.

**Electrical Specifications**

Design: Reactive  
Number of Input Ports: 4

Description	Minimum	Typical	Maximum	Units
Frequency Range	0.7		6	GHz
Impedance		50		Ohms
Input VSWR			1.35:1	
Output VSWR			1.35:1	
Insertion Loss			1.1	dB
Isolation	6.5			dB
Amplitude Balance		$\pm 0.4$		dB
Phase Balance		$\pm 7$		Degrees
Power Handling (CW)			300	Watts

**Mechanical Specifications**

**Size**  
 Length: 5.2 in [132.08 mm]  
 Width: 3.9 in [99.06 mm]  
 Height: 1.1 in [27.94 mm]  
 Weight: 1.76 lbs [798.32 g]

**Configuration**  
 Package Type: Connectorized  
 Input Connector: SMA Female  
 Output Connectors: N Female

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### FMS0031

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#### Environmental Specifications

##### Temperature

Operating Range

-55 to +85 deg C

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

#### Plotted and Other Data

Notes:

#### Typical Performance Data

4 Way Broadband Combiner SMA Female Input and N-Type Female Output from 700 MHz to 6 GHz rated 300 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.

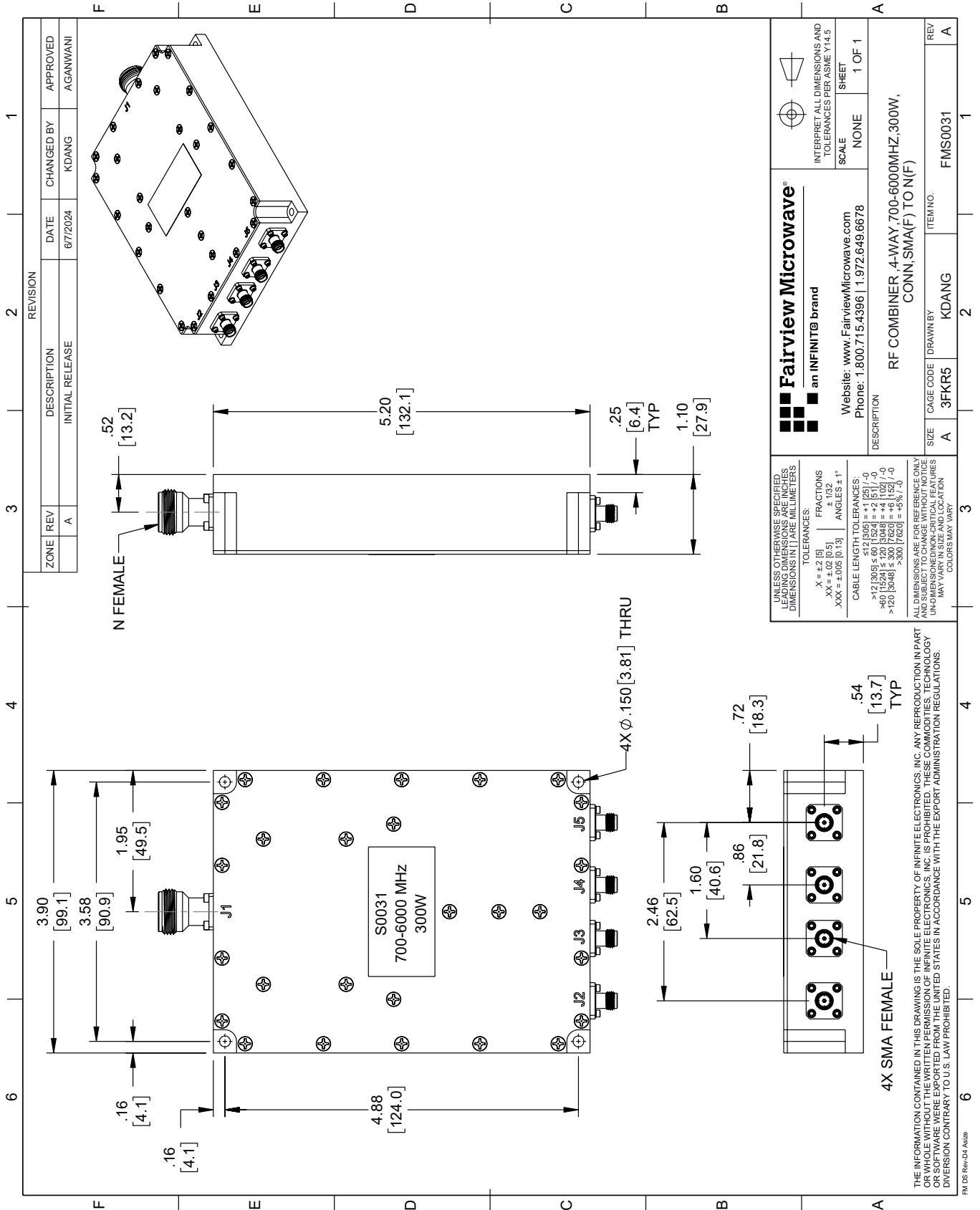
For additional information on this product, please click the following link: [4 Way Broadband Combiner SMA Female Input and N-Type Female Output from 700 MHz to 6 GHz rated 300 Watts FMS0031](#)

URL: <https://www.fairviewmicrowave.com/4-way-power-combiner-sma-broadband-700-mhz-6-ghz-300-watts-fms0031-p.aspx>

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# FMS0031 CAD Drawing

4 Way Broadband Combiner SMA Female Input and N-Type Female Output from 700 MHz to 6 GHz rated 300 Watts



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	8/7/2024	KDANG	AGANWANI

 <b>Fairview Microwave</b> an INFINIT® brand Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: RF COMBINER, 4-WAY, 700-6000MHZ, 300W, CONN, SMA(F) TO N(F)		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO: FMS0031
REV: A	DRAWN BY: KDANG	REV: A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32  
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
 >120 [3048] ≤ 300 [7620] = ±.8 [20.3] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [ ] ARE MILLIMETERS. COLORS MAY VARY.

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PM DS Rev-D4 Alt2