

SMA Frequency Divider Divide by 6 Prescaler Module Operating from 100 MHz to 15 GHz

The FMFD6000 is a coaxial packaged Frequency Divider module that operates across a wide input frequency range from 100 MHz to 15 GHz and supports a divide ratio of 6. Output Frequency is 16 MHz to 2.5 GHz. Impressive broadband typical performance of this Prescaler includes output power of +4 dBm and SSB phase noise of -153 dBc/Hz at 100 kHz offset. This exceptional technical performance is achieved through the use of a hybrid MIC PCB solder assembly which is RoHS and REACH compliant. This frequency divider design requires +5 Vdc typical bias voltage, operates over maximum temperature range of -40°C to +85°C, and has an absolute maximum rating for input power of +13 dBm. The rugged and compact package supports SMA Female connectors, RFI and Ground Pins. For highly reliable operation, the model is guaranteed to meet MIL-STD-202 environmental test conditions for Humidity, Shock, Vibration, and Altitude.

Electrical Specifications (TA= 25°C, Vd1 = 5 Vdc, Id1 = 205 mA)

Description	Min	Typ	Max	Units
Input Frequency (Sine Wave)	0.1		15	GHz
Output Frequency (Square Wave Output)	0.016		2.5	GHz
Output Power	3	5		dBm
Phase Noise @100kHz Offset		-153		dBc/Hz
Operating DC Voltage 1		5		V
Operating DC Current 1		205		mA

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	0.1 to 0.25	0.25 to 1	1 to 2	2 to 10	10 to 15	GHz
Input Power (CW), Max	10	10	10	10	10	dBm
Input Power (CW), Min	4	-8	-18	-24	-20	dBm

Mechanical Specifications

Size	
Length	1.25 in [31.75 mm]
Width	1.25 in [31.75 mm]
Height	0.563 in [14.3 mm]
Output Connector	SMA Female

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-55 to +125 deg C

Humidity MIL-STD-202F, Method 103B, Condition B

Shock MIL-STD-202F, Method 213B, Condition B

Vibration MIL-STD-202F, Method 204D, Condition B

Altitude MIL-STD-202F, Method 105C, Condition B



Features:

- Wide Input Frequency Range: 100 MHz to 15 GHz
- Divide-by-6 Prescaler
- Output Frequency 16 MHz to 2.5 GHz
- Output Power: +4 dBm typical
- Low SSB Phase Noise: -153 dBc/Hz @ 100 KHz offset typical
- RoHS & REACH Compliant Assembly
- Bias Voltage: +5 Vdc
- Operational Temperature Range: -40°C to +85°C
- Compact SMA Connectorized Package
- Designed to meet MIL-STD-202 Test Conditions

Applications:

- PLL Applications
- Test Instrumentation
- Countermeasures
- Point to Point Microwave Radio
- SATCOM
- MILCOM
- Base Stations

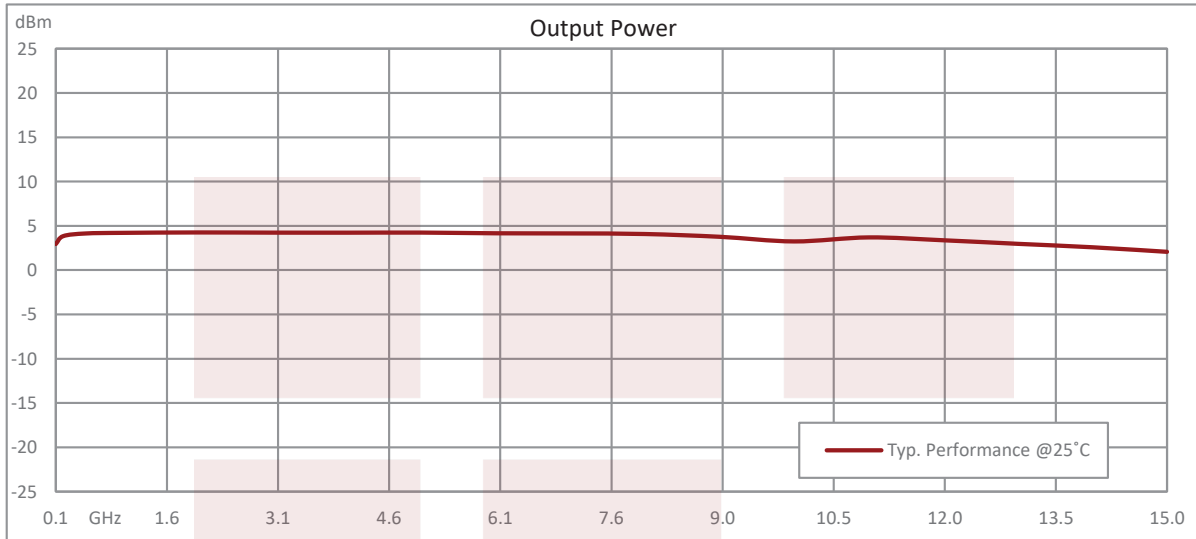
Fairview Microwave
301 Leora Ln., Suite 100
Lewisville, TX 75056
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

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

Plotted and Other Data

Notes:

Typical Performance Data

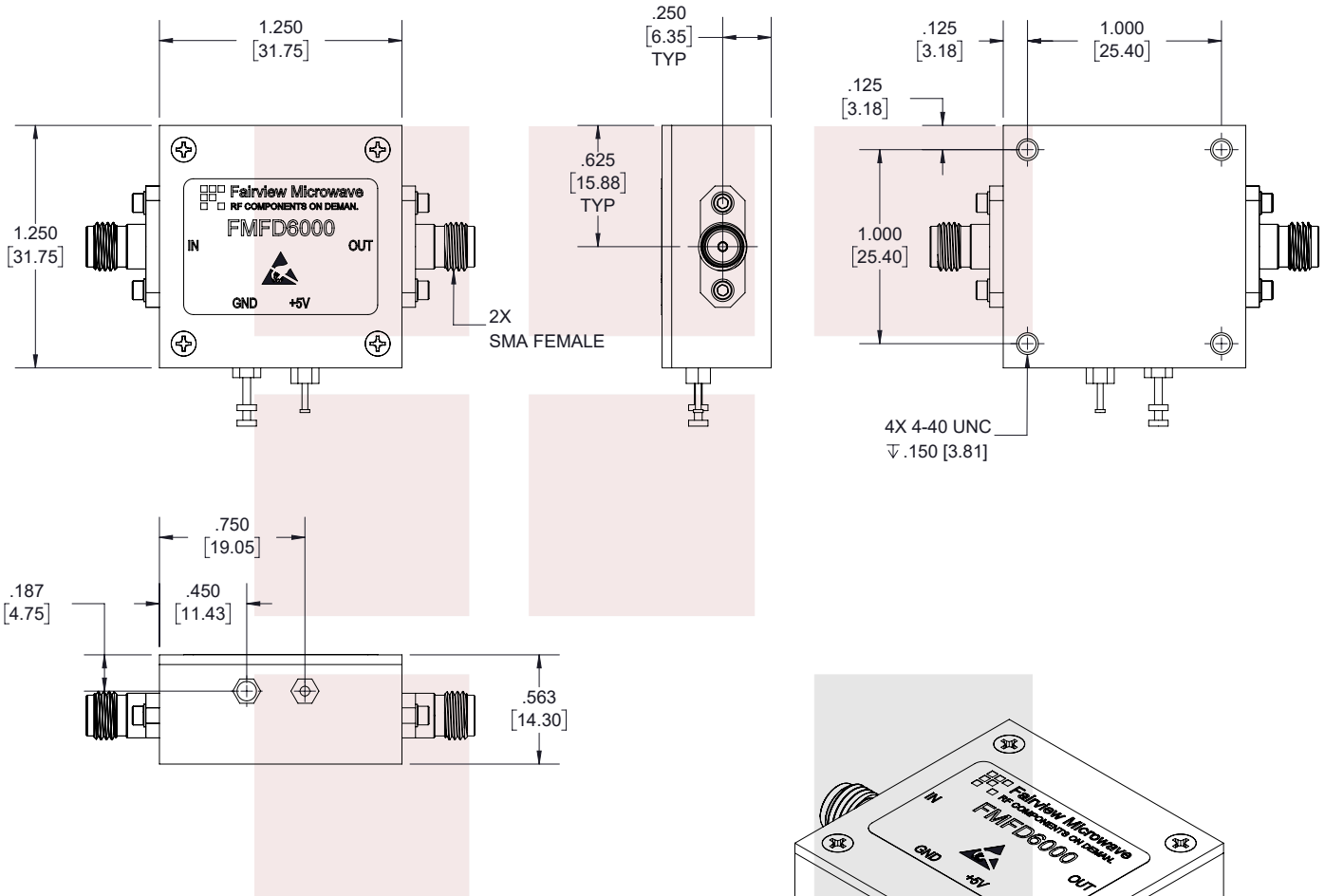


SMA Frequency Divider Divide by 6 Prescaler Module Operating from 100 MHz to 15 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [SMA Frequency Divider Divide by 6 Prescaler Module Operating from 100 MHz to 15 GHz FMFD6000](#)

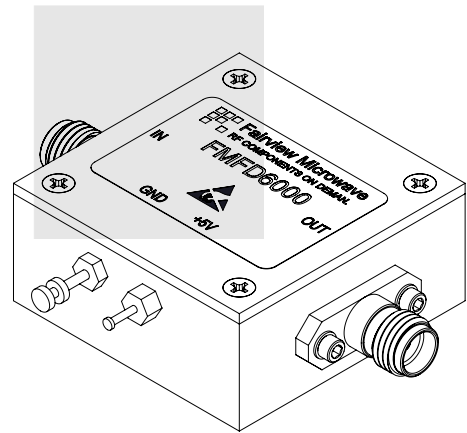
URL: <https://www.fairviewmicrowave.com/sma-frequency-divider-divide-6-prescaler-module-100-mhz-15-ghz-fmfd6000-p.aspx>

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.



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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



<p>Fairview Microwave an INFINIT[®] brand</p>		<p>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].</p>				
TITLE		DWG NO		CAGE CODE		
SMA Frequency Divider Divide by 6 Prescaler Module Operating from 100 MHz to 15 GHz		FMFD6000		3FKR5		
CAD FILE	04/26/18	SHEET	1 OF 1	SCALE	N/A	SIZE A 7361