



Blue Tops RF Modules > Low Noise Frequency Divider

Features:

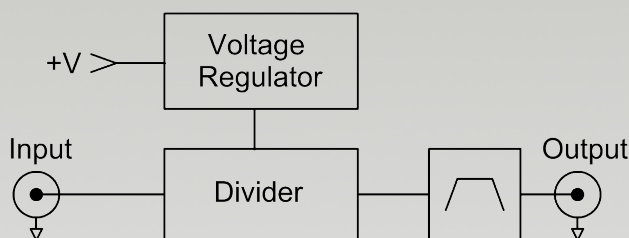
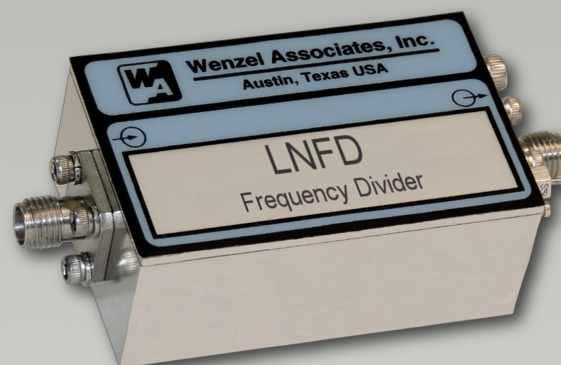
- Output Frequency to 1.25 MHz
- Division Factors: 2 or 4
- Output Waveform: Sine or Square
- Intrinsic Phase Noise to -167 dBc/Hz
- Optional Output Bandpass Filter
- Low Power Consumption

Applications:

- Synthesizer Building Block
- Communication Systems
- Radar Systems
- Electronic Warfare Systems

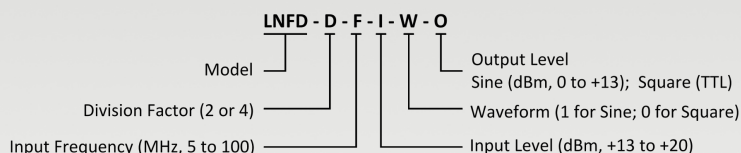
Description:

The LNFD is a frequency divider module with division factors of 2 or 4 for input frequencies up to 100 MHz. This module features a divider, an output bandpass filter for excellent harmonic suppression and a low noise voltage regulator for power supply spurious rejection, all integrated into a single housing. The output bandpass filter can be included as required or bypassed for a broadband response (TTL compatible square wave output).



Electrical Specifications	
Division Factor	2 or 4
Input Frequency	5 MHz to 100 MHz, fixed
Input Level	+13 dBm to +20 dBm, fixed (± 1 dB)
Output Frequency	down to 2.5 MHz (sine); to 10 kHz (square)
Output Waveform	Sine or Square
Output Level	Sine: to +13 dBm (± 2 dB) Square (TTL Compatible): ≤ 0.8 VDC (LO); +4.8 to +5.2 VDC (HI)
Phase Noise, Residual (Intrinsic, Output Referred, 100 MHz Model)	-167 dBc/Hz (100 kHz offset)
Harmonics	≤ -30 dBc (sine)
Sub-Harmonics	≤ -50 dBc (sine)
Spurious (Excluding Supply Line Related Spurs)	≤ -80 dBc
Supply Voltage	+15 VDC $\pm 5\%$
Current Draw	≤ 60 mA
Operating Temperature	0 to +50°C
Storage Temperature	-40 to +85°C
Mechanical	
Dimensions	2" x 1.25" x 0.8"
DC Supply	Feed Thru Capacitor Solder Pin
Ground	Turret Terminal Solder Pin
RF Input / Output	SMA female *
* SMA female connectors are used unless otherwise specified. Other options include SMA male, right angle SMAs, BNC female and others. Contact factory for custom configurations.	

Ordering Information:

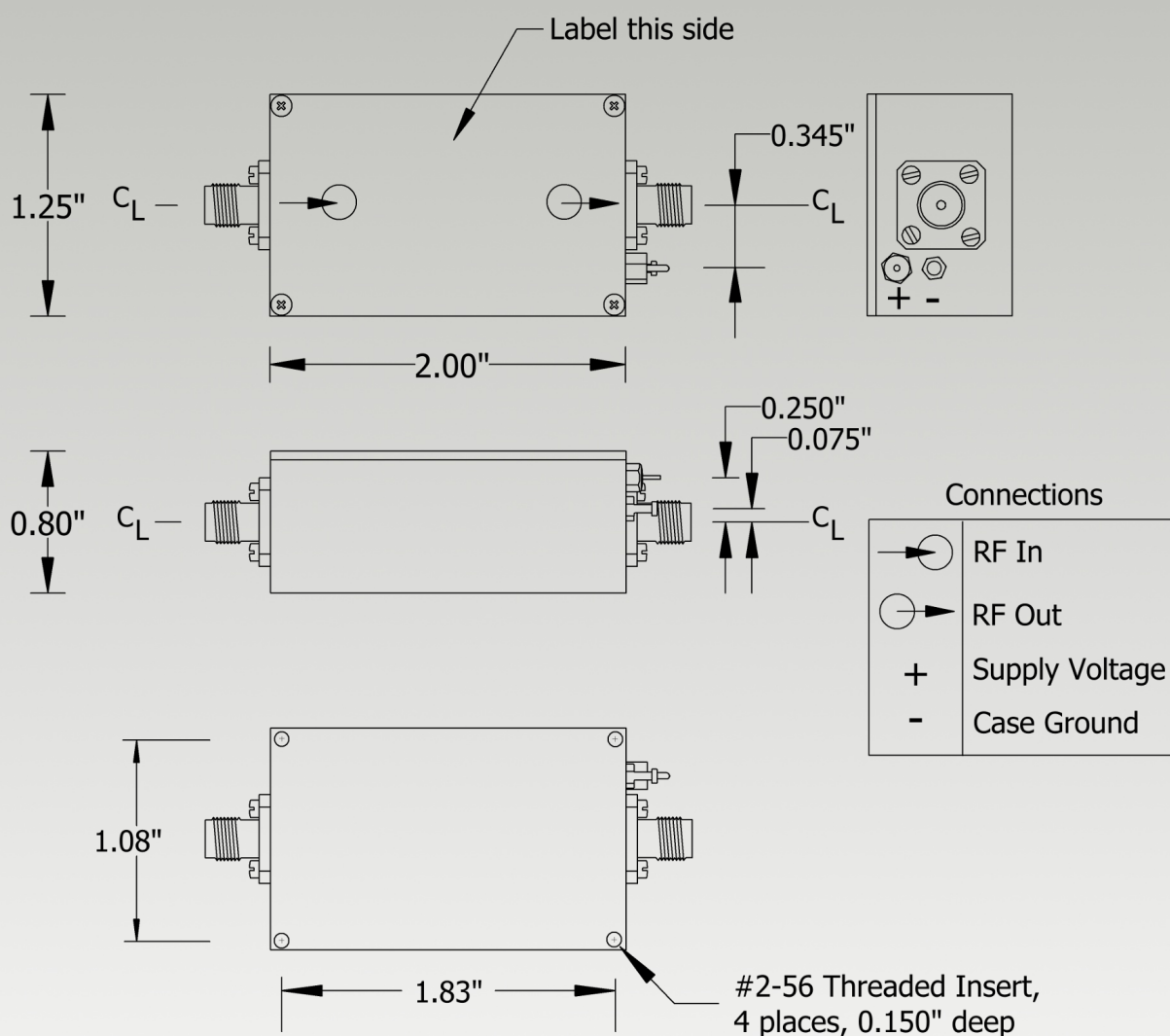


Standard P/N	Input Frequency	Division Factor	Input Level	Output Level	Output Frequency	Output Referred Residual Phase Noise (100 kHz offset)	Supply Voltage
LNFD-2-10-13-1-13	10 MHz	$\div 2$	+13 dBm	+13 dBm	5 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-4-10-13-1-13	10 MHz	$\div 4$	+13 dBm	+13 dBm	2.5 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-2-10-13-0-TTL	10 MHz	$\div 2$	+13 dBm	0 to +5V TTL	5 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-4-10-13-0-TTL	10 MHz	$\div 4$	+13 dBm	0 to +5V TTL	2.5 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-2-50-13-1-13	50 MHz	$\div 2$	+13 dBm	+13 dBm	25 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-2-80-13-1-13	80 MHz	$\div 2$	+13 dBm	+13 dBm	40 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-2-100-13-1-13	100 MHz	$\div 2$	+13 dBm	+13 dBm	50 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-4-100-13-1-13	100 MHz	$\div 4$	+13 dBm	+13 dBm	25 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-2-100-13-0-TTL	100 MHz	$\div 2$	+13 dBm	0 to +5V TTL	50 MHz	≤ -167 dBc/Hz	+15 VDC
LNFD-4-100-13-0-TTL	100 MHz	$\div 4$	+13 dBm	0 to +5V TTL	25 MHz	≤ -167 dBc/Hz	+15 VDC





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