



USB Frequency Synthesizer Module, Phase Locked Loop (PLL), 5 GHz to 10 GHz Output, SMA

Synthesizers Technical Data Sheet

PE11S3902

Features

- Wideband Output Frequency
- 5 GHz to 10 GHz
- Integer and Fractional operating modes
- > +17 dBm max output power
- 30 dB Attenuation adjustable in 1 dB steps
- USB 2.0 Interface
- Female SMA output
- USBTMC VISA Compliant
- User Selectable internal reference or externally applied reference
- Small compact package size
- LED indicators
- Downloadable User Manual
- Accessory cables included

Applications

- Signal Generators
- Test Equipment
- RF System Integration
- Communication Systems
- EW Systems
- C-Band and X-Band Systems
- Radar Systems
- Frequency Conversion
- SIGNIT

Description

The PE11S3902 is a Frequency Synthesizer Module that covers a wide frequency band from 5 GHz to 10 GHz with exceptional spurious rejection and phase noise performance. Attenuation range up to 30 dB is adjustable in 1 dB steps and maximum output power is greater than +17 dBm across the entire frequency band. This high quality signal source has several outstanding features including a Female SMA output connector and a USB 2.0 interface that is powered and command controlled directly by a host PC, and is VISA compliant which enables seamless cross platform use. The synthesizer can be GUI controlled via Windows®, Macintosh®, or Linux® platforms, or with SCPI compliant VISA commands (downloadable user manual), or with other system design software such as LabVIEW®. The compact size makes it ideal for bench top test and measurement use or for radar and communication systems. Frequency resolution of the PE11S3902 is available in integer and fractional operating modes and the User can select between an internal reference or externally applied reference. The RF Synthesizer Module comes complete with a USB 2.0 A extension and an SMA male to MMCX plug cable.

Electrical Specifications (TA= 25°C, Id1 = 480 mA)

Mode	Integer/Fractional
Reference	Internal (External Optional)
Option(s)	Phase Lock Indicator
Control Interface	USB

Description	Minimum	Typical	Maximum	Units
Frequency Range	5		10	GHz
Output Power	-15		+18	dBm
Step Size (Integer Mode)		200		MHz
Step Size (Fractional Mode)		1		MHz
Phase Locked Speed		1		ms
Phase Noise @100kHz Offset		-72		dBc/Hz
2nd Harmonic		-24.5		dBc
3rd Harmonic		-18.5		dBc
4th Harmonic		-30.5		dBc

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [USB Frequency Synthesizer Module, Phase Locked Loop \(PLL\), 5 GHz to 10 GHz Output, SMA PE11S3902](#)





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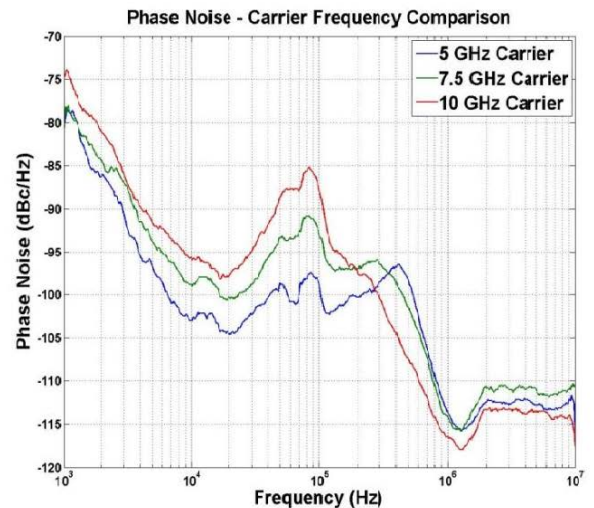
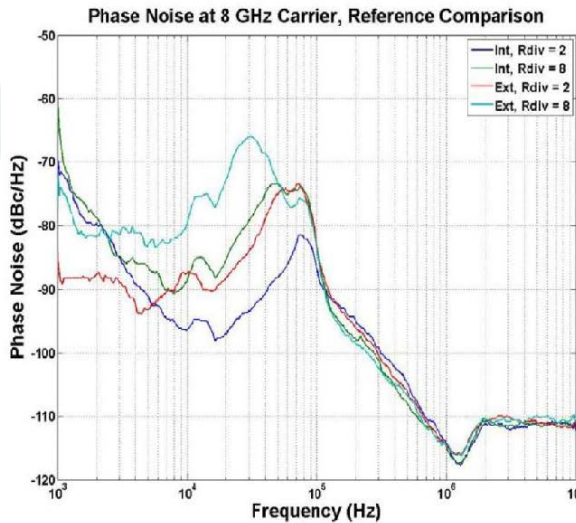
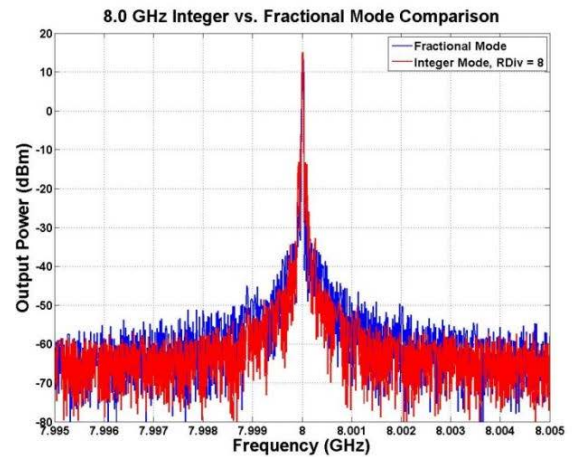
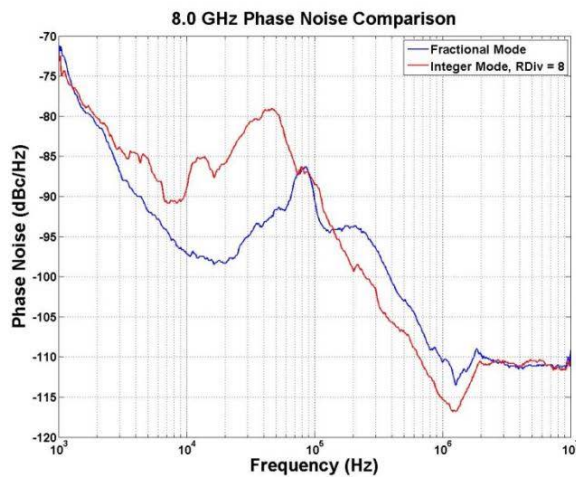
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Compliance Certifications (visit www.Pasternack.com for current document)
RoHS Compliant

Plotted and Other Data
Notes:

Typical Performance Data



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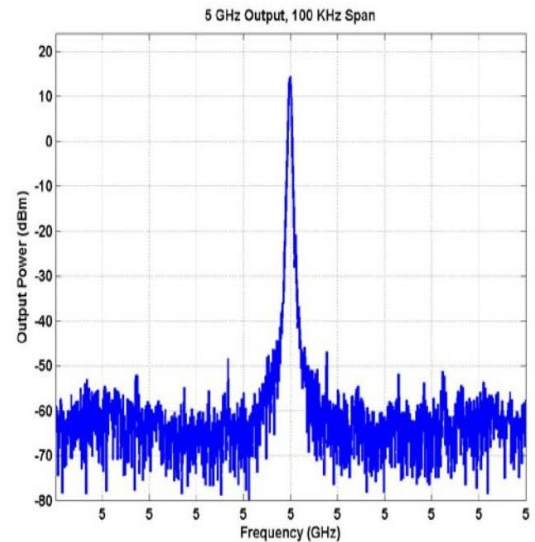
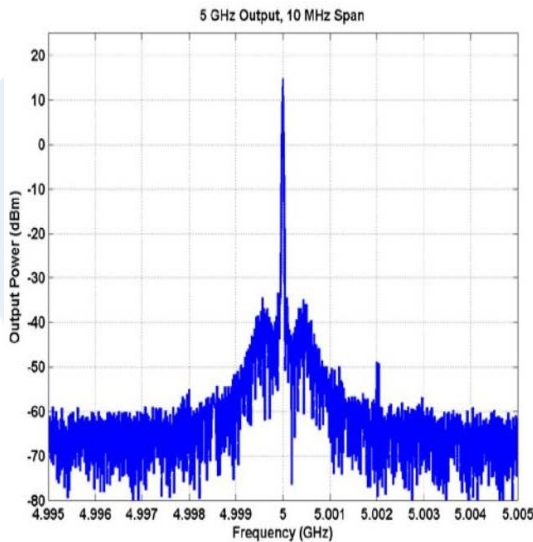
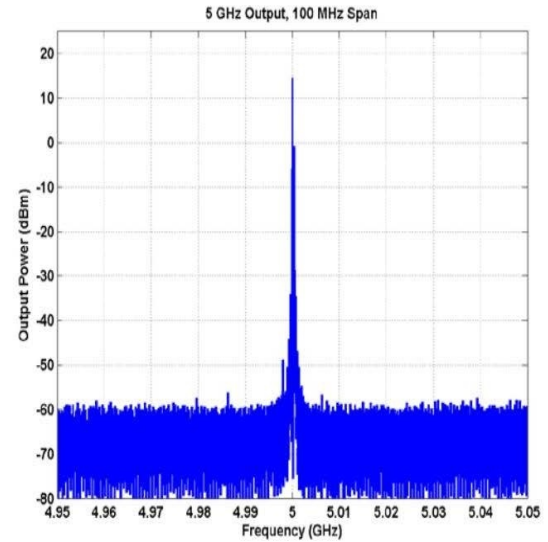
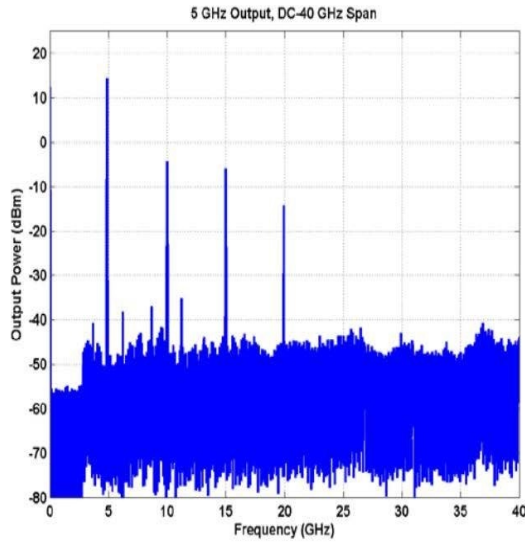




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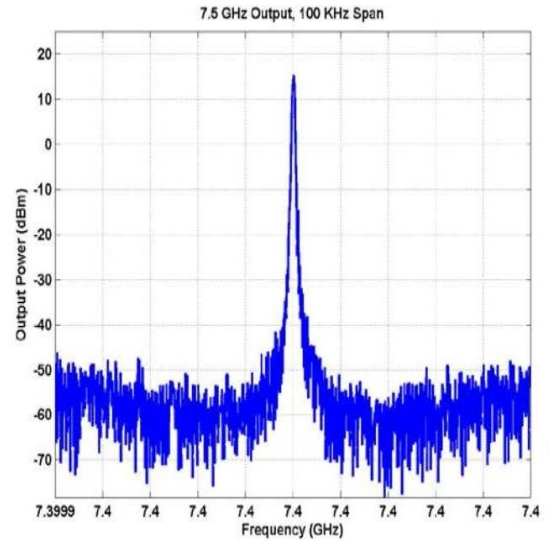
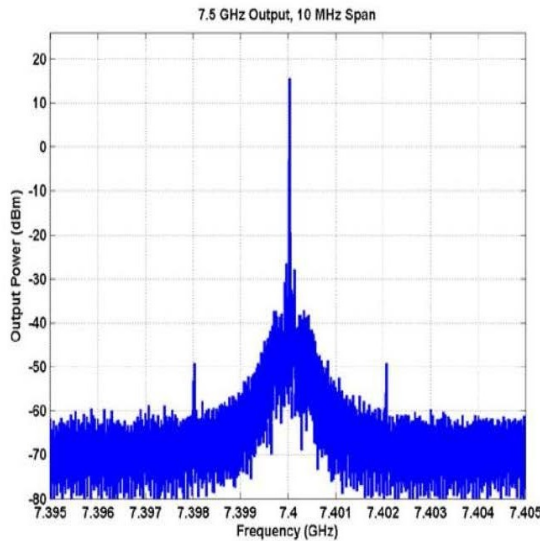
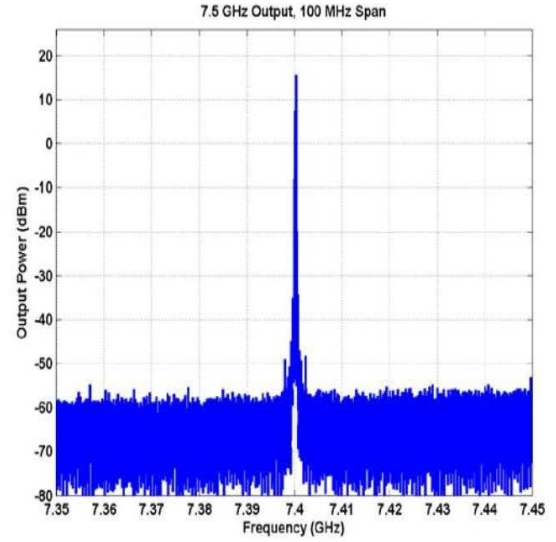
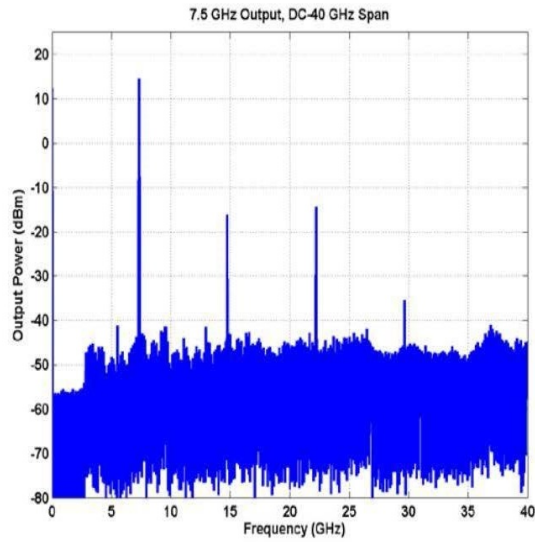




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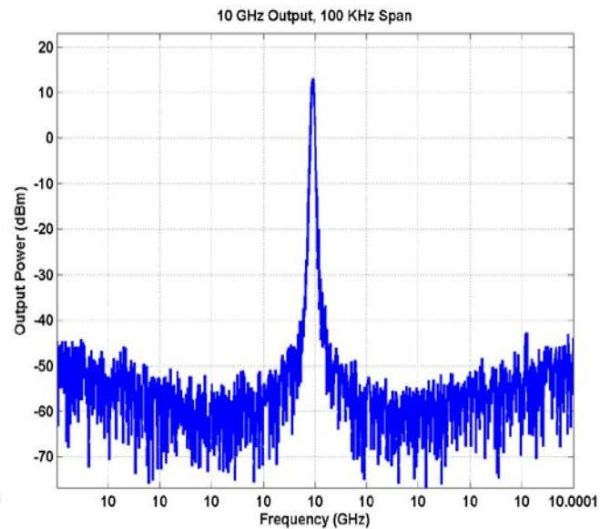
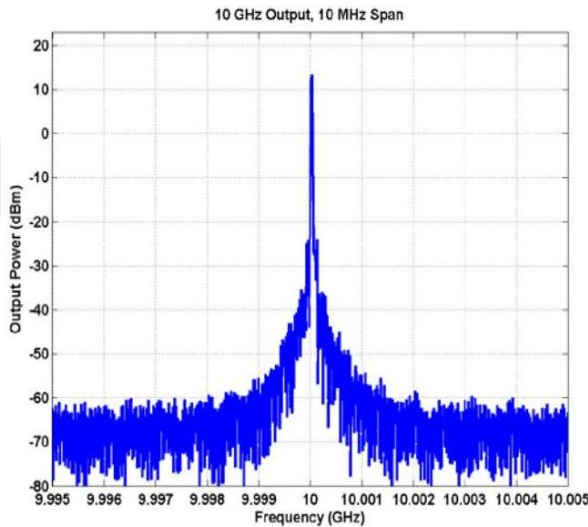
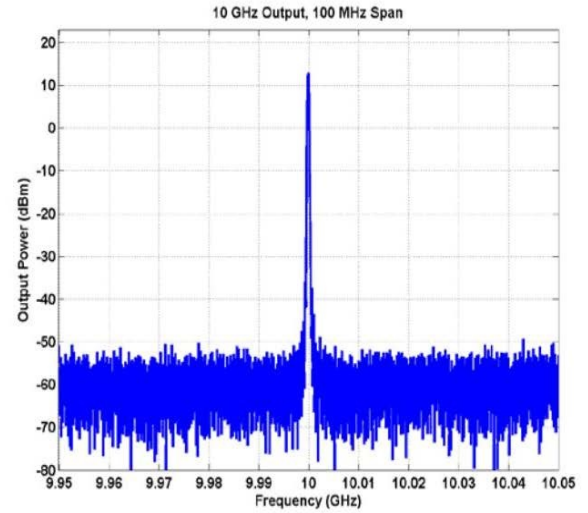
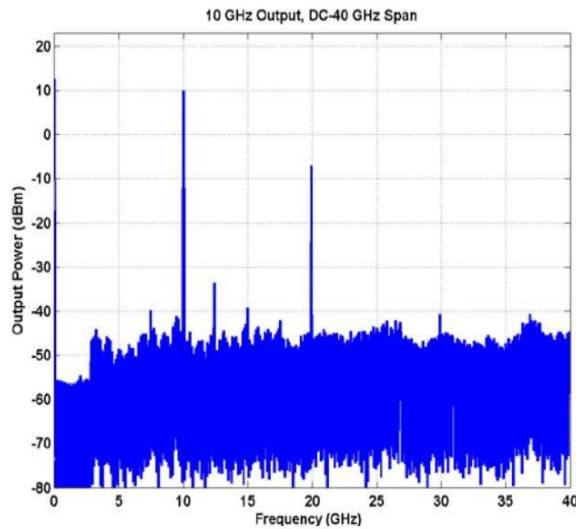




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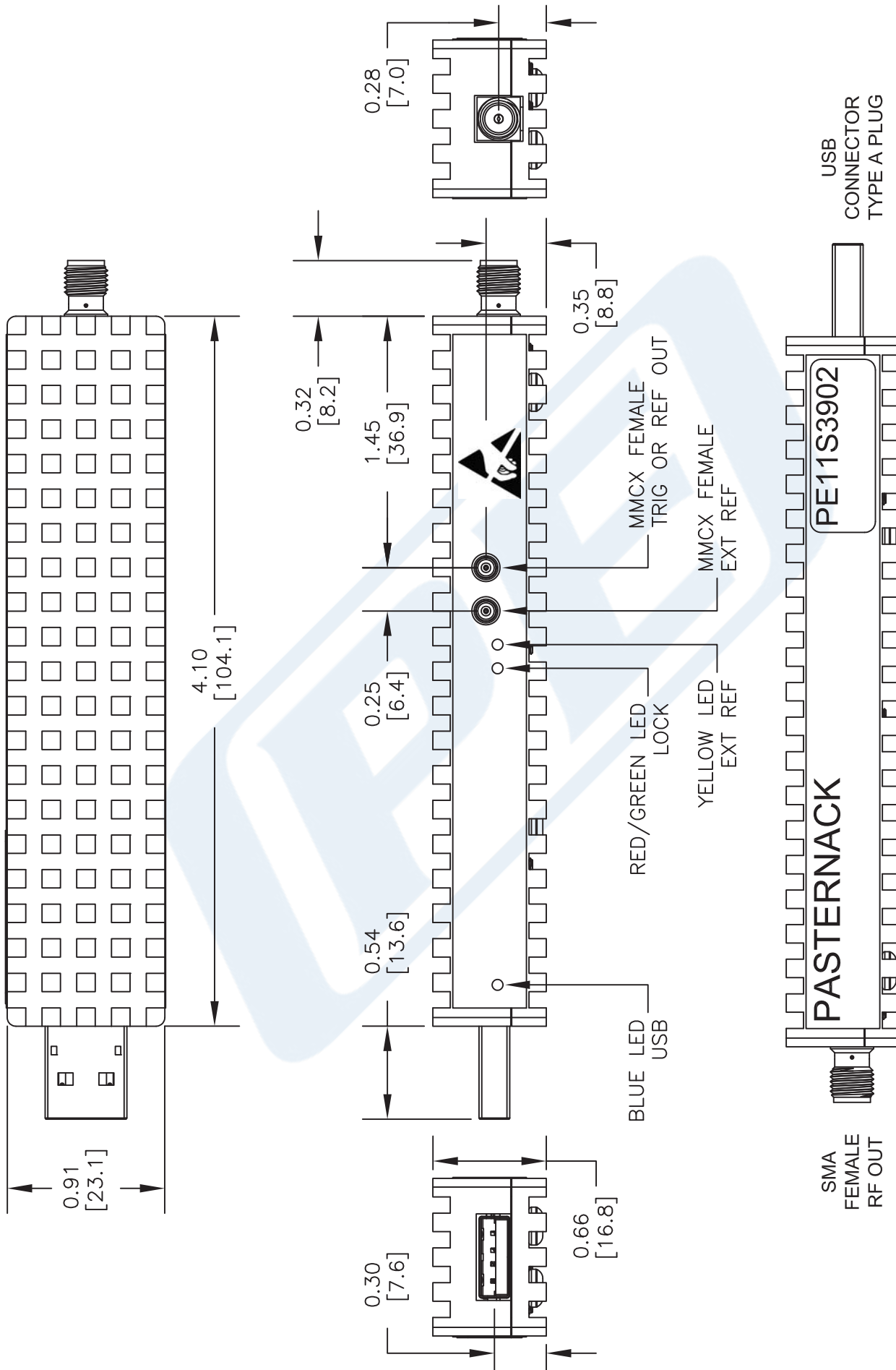


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PE11S3902 CAD Drawing

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DWG TITLE

PE11S3902

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].

PE PASTERNAK
 THE ENGINEER'S RF SOURCE
 Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
 Phone: (949) 261-1920 | Fax: (949) 261-7451
 Website: www.pasternack.com | E-Mail: sales@pasternack.com

FSCM NO. 53919

CAD FILE 021516

SCALE N/A

SIZE A

2233