

Bench-Top 95 dB Programmable TTL Controlled Attenuator, SMA Female to SMA Female, 1 dB Steps From 200 MHz to 6 GHz

PE70A5013



Features

- 200 MHz to 6000 MHz Bandwidth
- Manual, Ethernet, or RS-232 Controlled
- 0-95 dB attenuation
- 1 dB Step Size
- 50 Ohms
- Switching Speed: 1 microsec
- 2 Individually Controlled Programmable Step Attenuators
- Insertion Loss: 8 dB typ
- Attenuation Accuracy: +/- 1 dB typ
- Max Average Pin: 20 dBm
- +12 Vdc supply (AC/DC Transformer Included)
- SMA female connectors
- Remote Control: Ethernet RJ45 port or RS-232 port in rear
- Downloadable User Manual

Applications

- Engineering Test & Measurement (ATE) Labs
- Communications Systems
- Military Radio
- Radar
- Wimax & 3G Simulators
- Wireless Fading Simulation

Description

The PE70A5013 is a 50 ohm Benchtop Programmable Step Attenuator assembly which operates over the frequency range of 200 MHz to 6000 MHz. This instrument has 2 individually controlled solid state programmable attenuators that each have a range from 0 to 95 dB. Insertion loss is 8.0 dB typical with maximum average input power of +20 dBm. Additional typical performance includes +/- 1.0 dB attenuation accuracy and switching speed of 1 microsecond. The DC supply is +12 Vdc with a 100-240 VAC AC/DC transformer included. Note that both attenuators can be connected in series to attain higher attenuation levels, but this performance is not guaranteed. The design features 2 lever switches on the front panel that includes digital readouts and SMA female RF input/output ports. Both switches are manually adjustable in 1 dB step sizes with either tap to step or hold to jog functions. These 2 switches can work simultaneously to perform manual handover tests. The design can also be command controlled remotely by executable test scripts using Ethernet (RJ45 Female) or RS-232 (serial control) connector interfaces. The Ethernet, RS-232, and manual interfaces can all be utilized simultaneously without blocking other users from using the test system. The firmware can handle up to 12 network connections. A comprehensive user manual is available to download.

Electrical Specifications (Values at +25°C, sea level)

Description	Min	Typ	Max	Unit
Frequency Range	0.2		6	GHz
Impedance		50		Ohms
Attenuation Range	0		95	dB
Insertion Loss		8	8.5	dB
VSWR			2:1	
Survival Power Average 0 to +50 deg C			+25	dBm
Power Handling Capacity			+20	dBm
Accuracy of Attenuation				
1 dB to 3 dB		±0.5		dB
4 dB to 7 dB		±0.75		dB
8 dB to 11 dB		±1		dB
12 dB to 95 dB is ±1.25 dB or 4% whichever is greater				
Step Size		1		dB
Switching Time		1		us

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Mechanical Specifications

Size

Length	0 in [0 mm]
Width	0 in [0 mm]
Height	0 in [0 mm]
Weight	4.561 lbs [2.07 kg]
Connector 1	Field Replaceable SMA Female
Connector 2	Field Replaceable SMA Female

Environmental Specifications

Temperature

Operating Range	0 to +50 deg C
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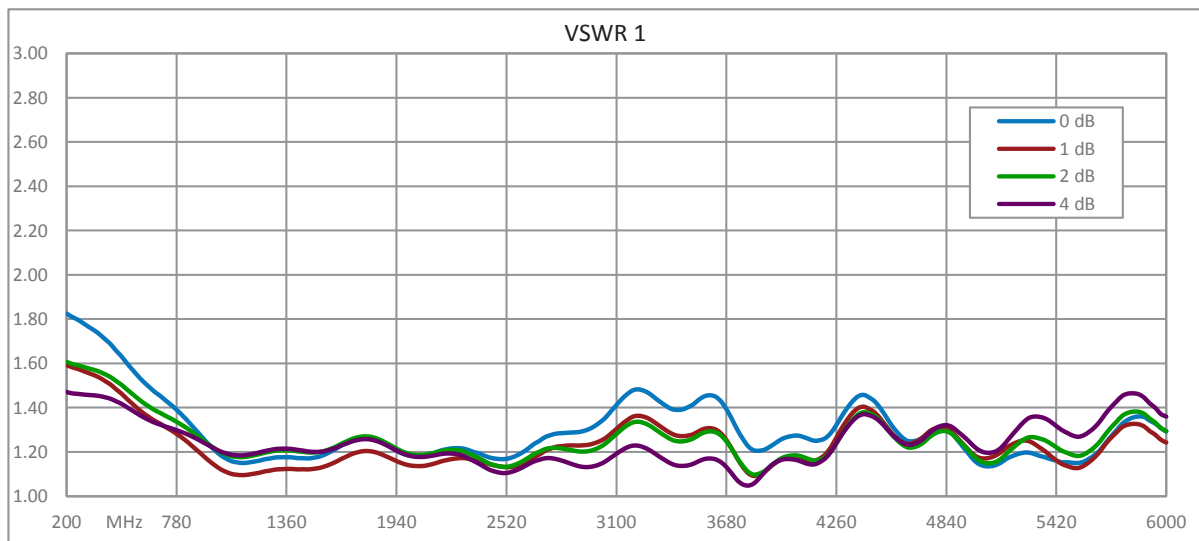
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25 °C, sea level
- ESD Sensitive Material, Transport material in Approved ESD bags. Handle only in approved ESD Workstation.

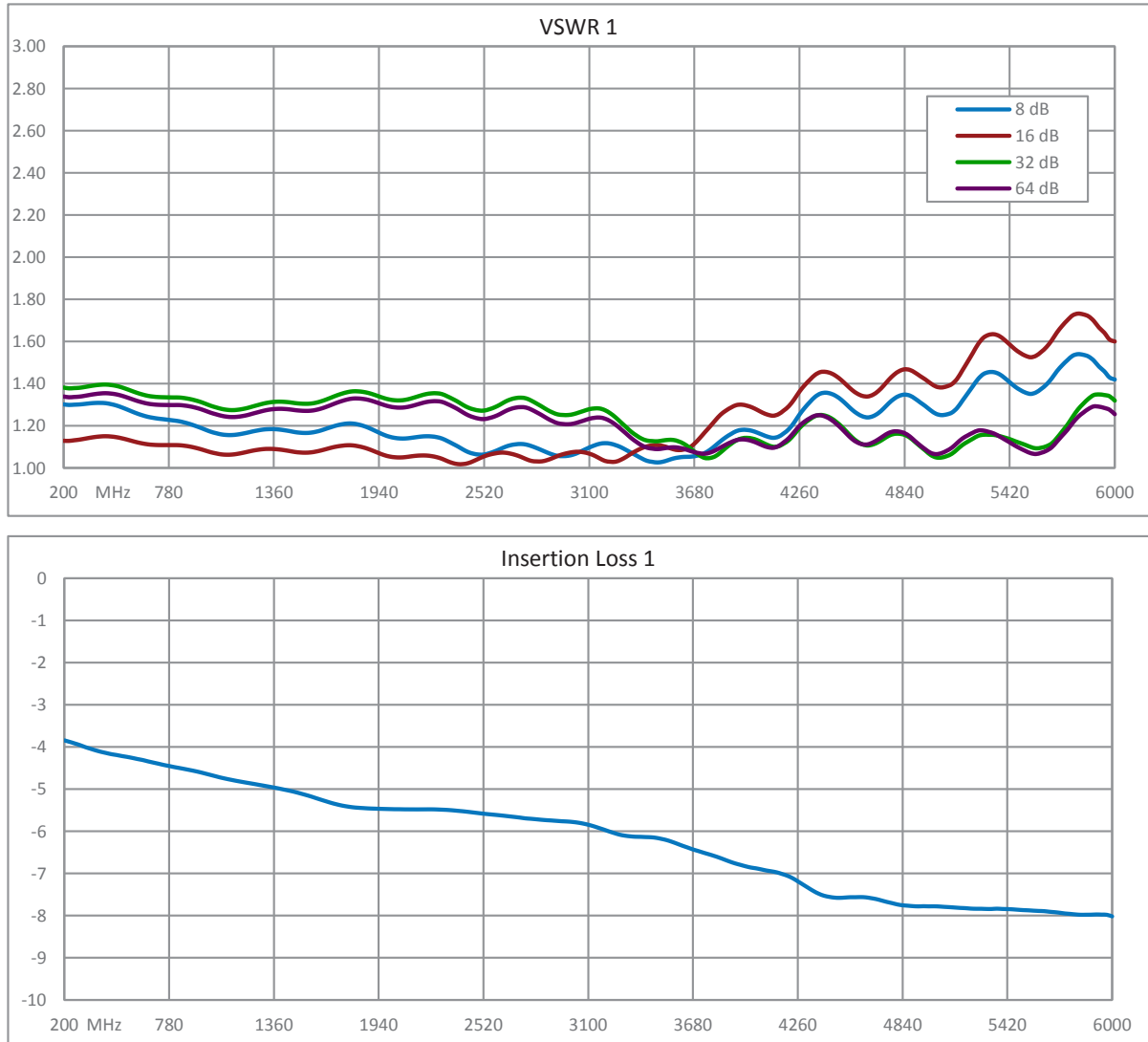
Typical Performance Data



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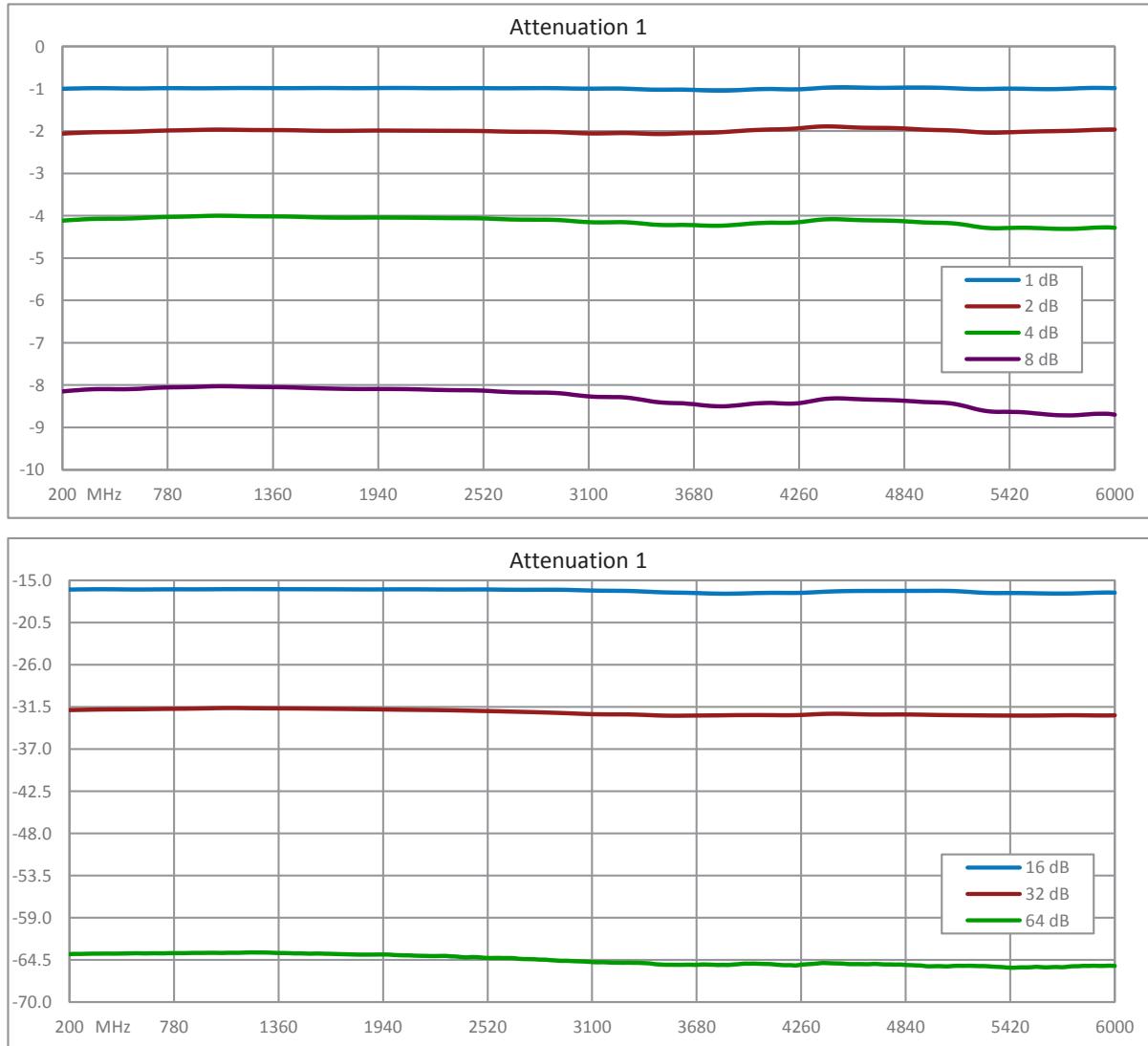
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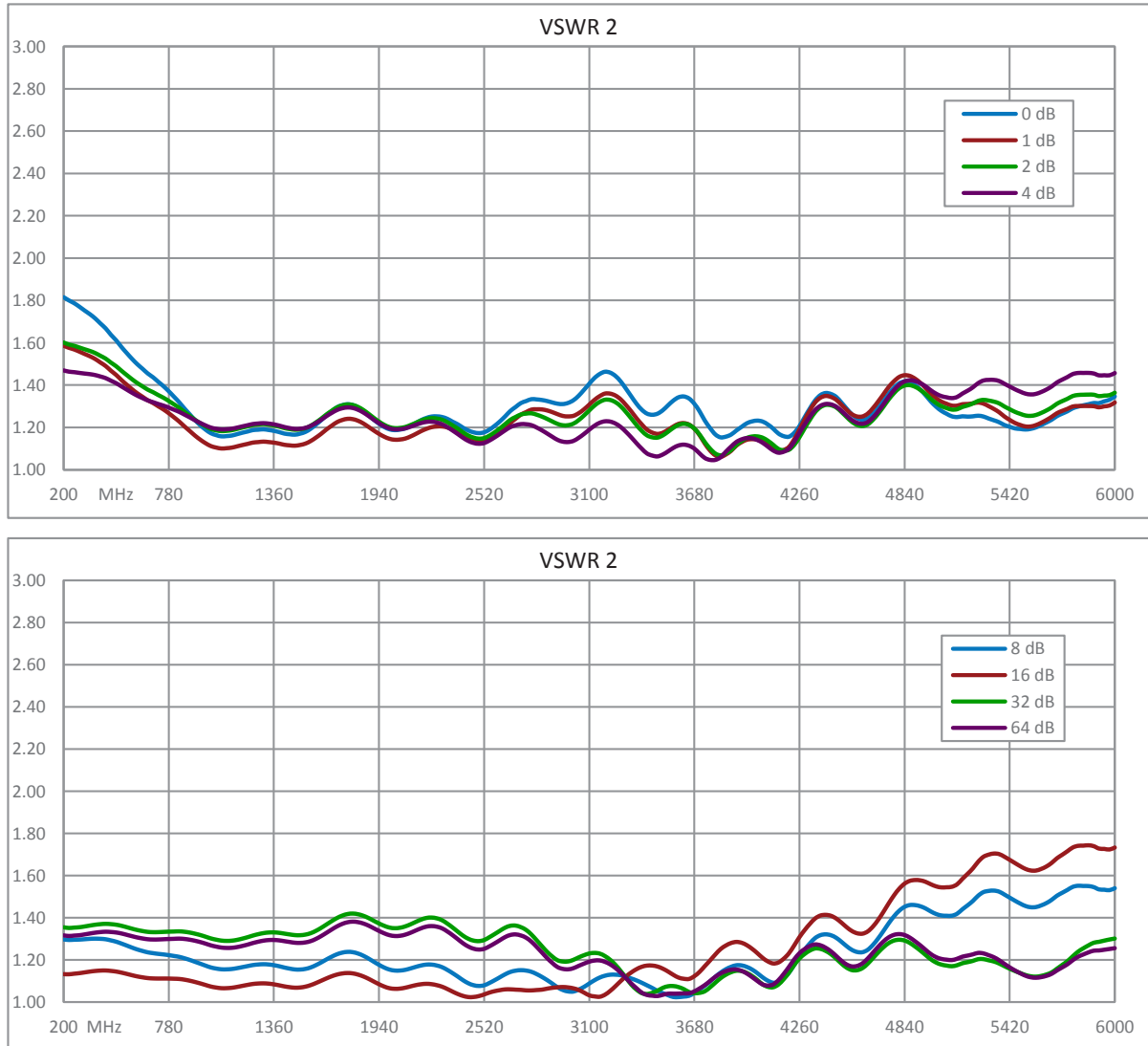
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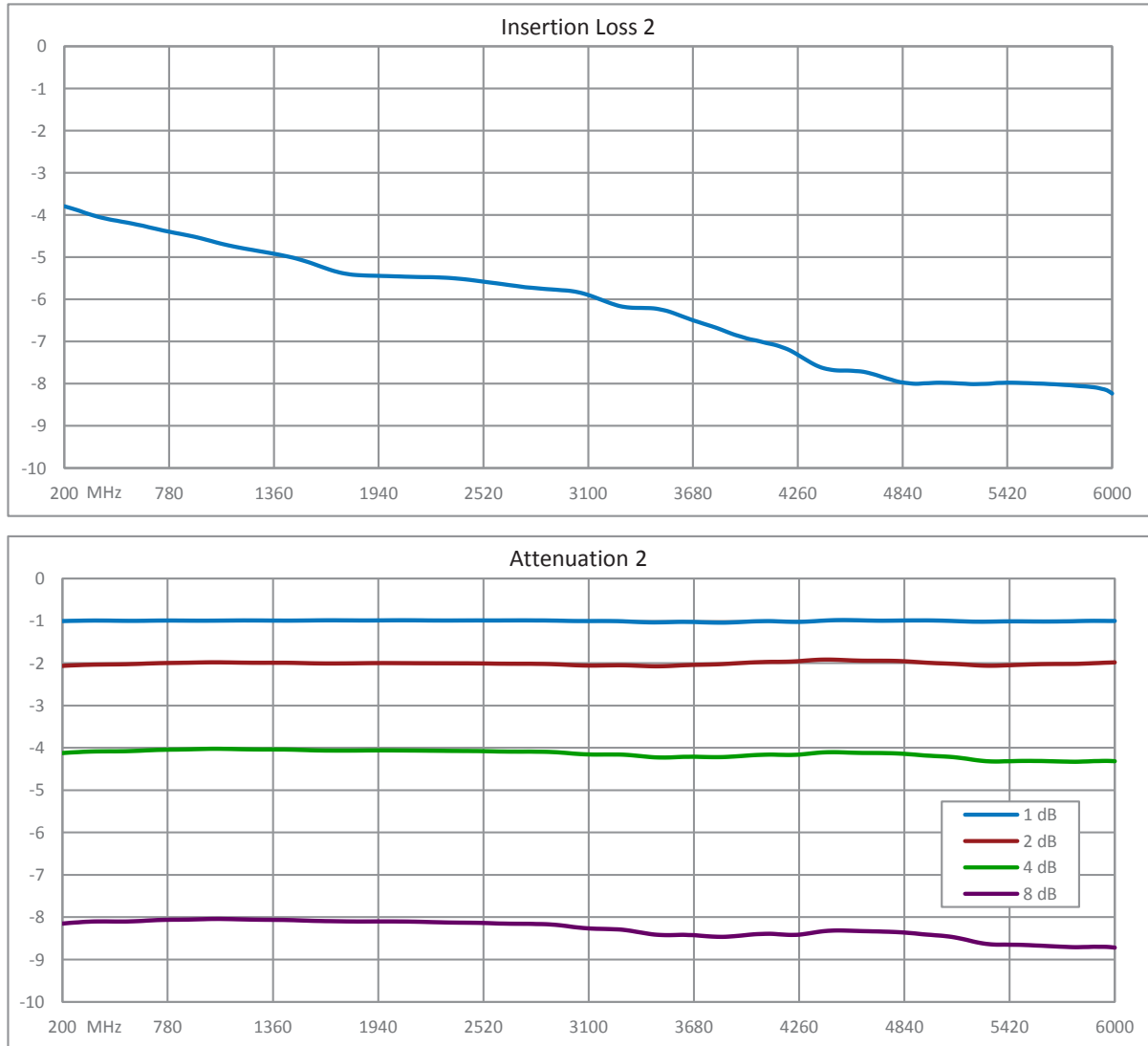
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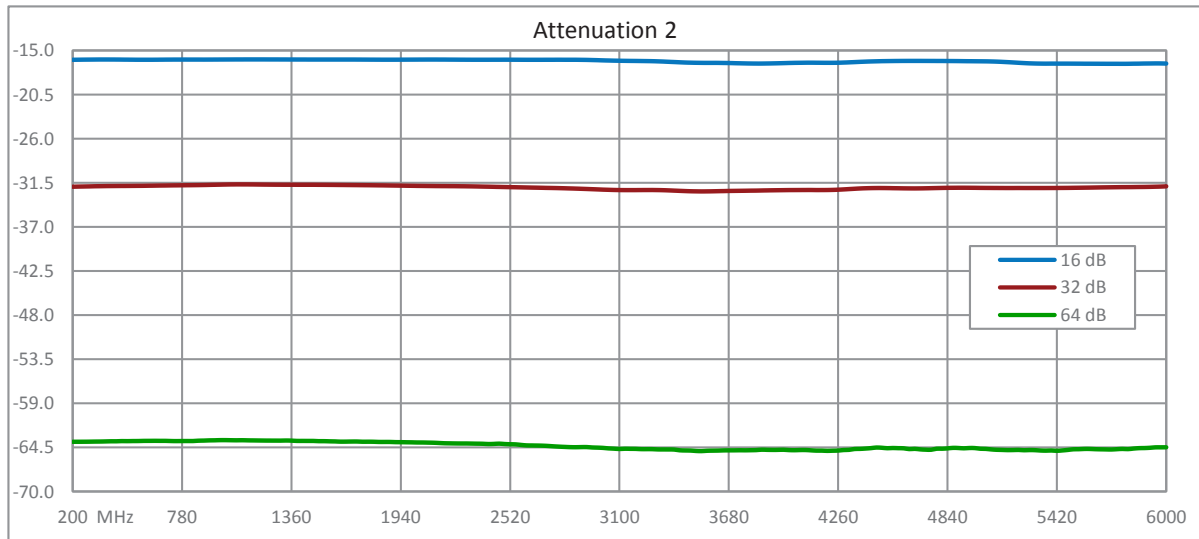


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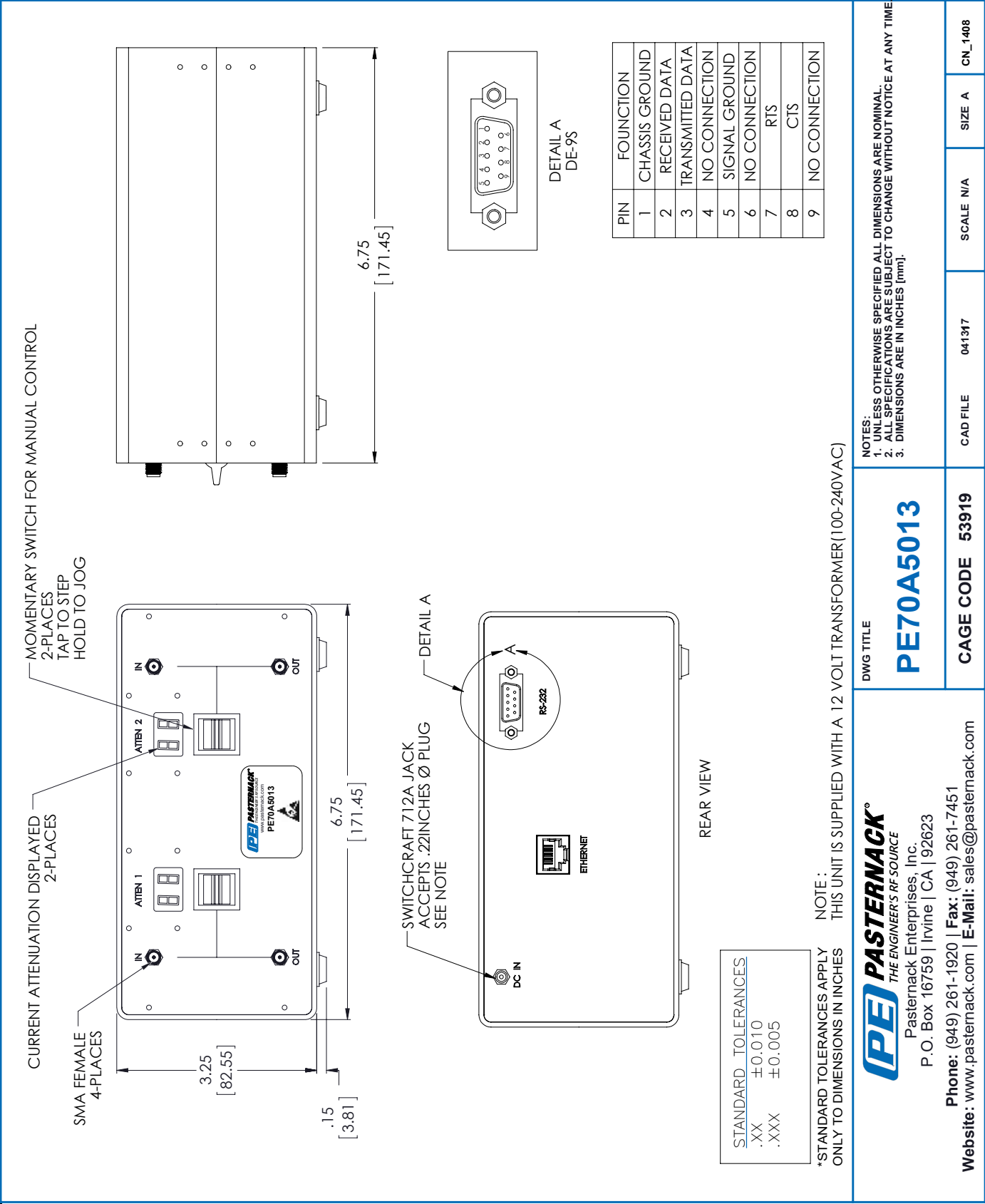
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Bench-Top 95 dB Programmable TTL Controlled Attenuator, SMA Female to SMA Female, 1 dB Steps From 200 MHz to 6 GHz PE70A5013](https://www.pasternack.com/bench-top-95db-ttl-controlled-sma-female-sma-female-0-watts-attenuator-pe70a5013-p.aspx)

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PE70A5013 CAD Drawing

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