

Model HA-250-2.5

Digital Amplifier Module

Features

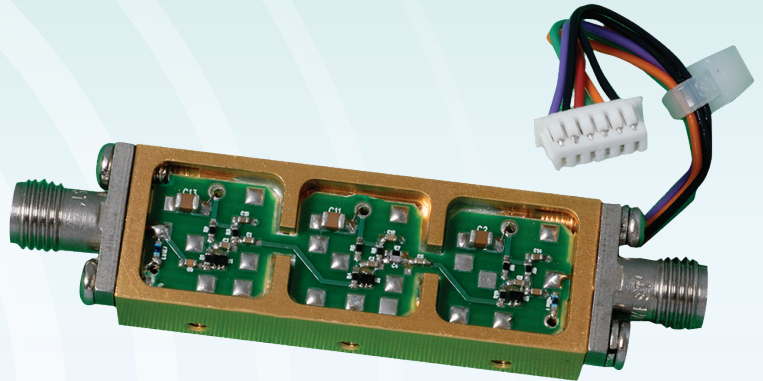
- True DC coupled precision amplification to 2.5 GHz
- Fixed high gain: 48 dB
- Input and output matched to 50 Ω
- Low noise figure: 1.7 dB
- Excellent flatness with positive gain slope equalization
- Excellent phase linearity for pulse work
- Total power consumption: 750 mW maximum

Applications

- Interface from Rapid Single Flux Quantum (RSFQ) logic to TTL and ECL systems
- Fiber optic detector amplification
- Low-level signal instrumentation
- Multi-channel gain and phase matched for a variety of applications

Accessories Available

power supply, optional battery power, multi-amplifier assembly for bus applications, DC bias supply for laboratory applications, field-replaceable connectors with a standard SMA flange, positive gain slope set at factory

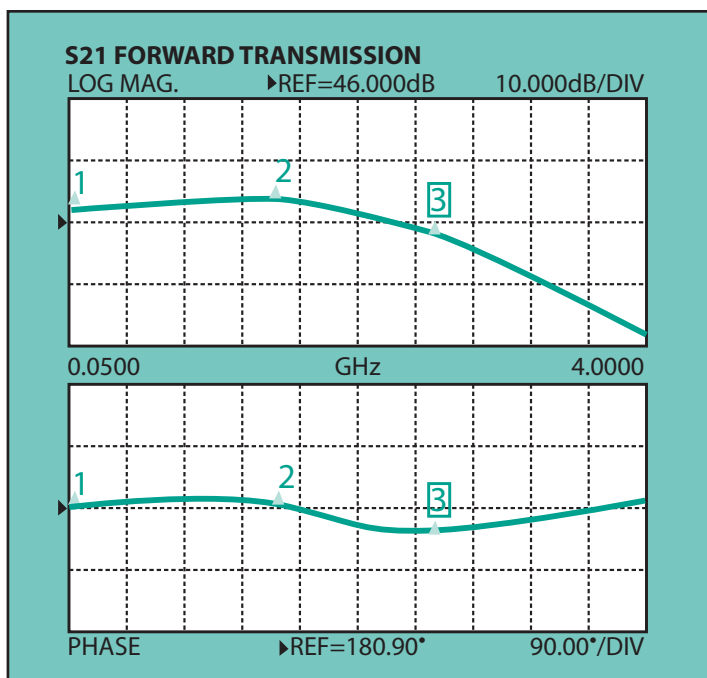
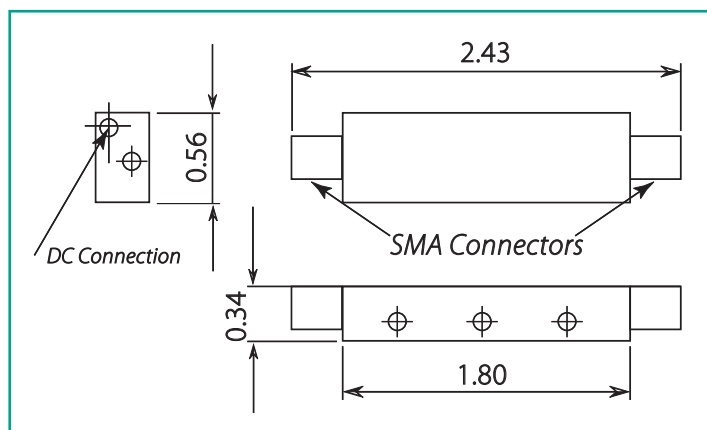


Description

The Model HA-250-2.5 is a wideband, high gain digital amplifier module. The low noise, modular device requires only ± 5 V supplies and is optimized for the amplification of low-level digital data. Input signals with a Full Scale Range (FSR) of 3 mV are amplified to X750 mV, a level suitable for RSFQ logic to TTL or ECL decision-circuit comparators.

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Specifications/Performance	
Gain	48 dB
Noise Figure	1.7 dB
Wideband	DC to 2.5 GHz
Input Range	0.2 – 3 mVpp
Input Impedance	50 Ω
Output Range	+/-750 mV
Output Impedance	50 Ω
Gain Accuracy	+/-0.5 dB
Gain Slope (customizable)	0 – +6 dB
3 dB Bandwidth	2.5 GHz
1 dB Compression	-1 dBm
Rise-time	140 pSec
Overload Recovery	1 μ Sec
Power Harness	S1021-0800
Connectors	2x SMA



subject to change

Construction

2.43" x 0.56" x 0.34"

Power Supplies: +/-5 V, +100 mA/-50 mA

Power Dissipation: 750 mW

RoHS compliant

Ordering information: sales@hypres.com

Model HA-250-2.5, Digital Amplifier Module



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