CATV

Power Doubler Hybrid Amplifier ADCA4012

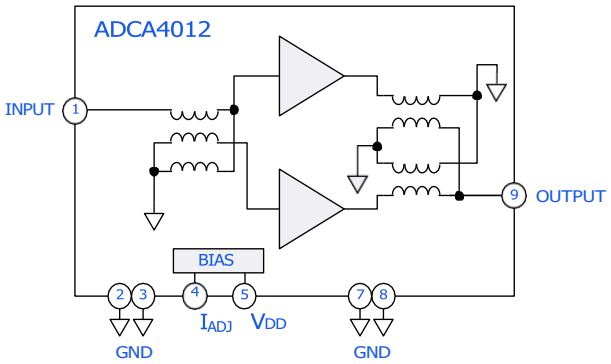
75Ω 108 to 1794 MHz

THE BIG DEAL

- High RF Output
- High Gain
- Very Low Distortion
- Transient and Surge Protection
- V_{DD} Range from +24 V to +34 V
- Configurable DC Current
- Industry-Standard, 8-pin SOT115J Module Package

Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM



APPLICATIONS

- 108 MHz to 1794 MHz Cable Television (CATV) Infrastructure Amplifier Systems
- Remote Physical Layer (PHY)
- FDX, Extended Spectrum, Unified Nodes
- DOCSIS® 3.1 and 4.0 Compliant

PRODUCT OVERVIEW

The ADCA4012 is a high gain, power doubler hybrid amplifier optimized over a wide range of bias conditions for power efficiency and customer flexibility. The ADCA4012 is ideally suited for use in DOCSIS® 4.0 node applications. DC current and supply voltage can be adjusted externally for optimum distortion performance vs. power consumption over a range of output levels. The ADCA4012 is packaged in the industry-standard SOT115J package.

KEY FEATURES

Features	Advantages
High RF Output	Extends reach to next active and minimizes need for booster stages in the network.
High Gain	Minimizes the input signal needed to drive the full output; reduces bias in driver stage.
Adjustable Bias	Allows for optimization of network efficiency for various use cases and deployments.

Contact Mini-Circuits Applications for full data sheet.

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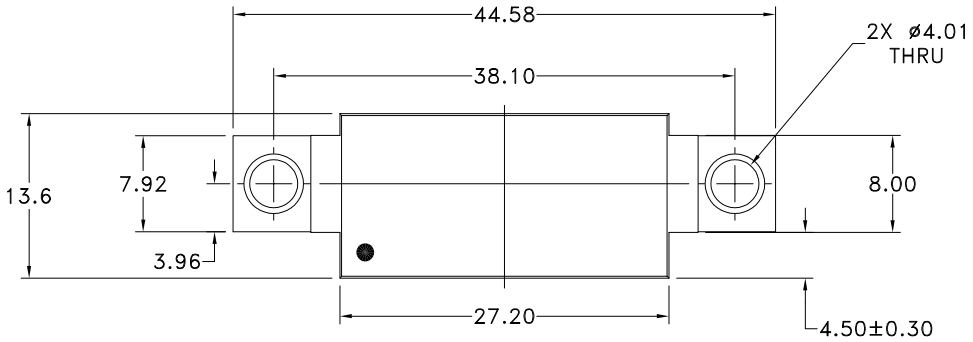
ADDITIONAL DETAILED TECHNICAL INFORMATION IS AVAILABLE ON OUR DASHBOARD.

Case Style	NP3629-3. Plastic package, Lead Finish: Phosphor Bronze
RoHS Status	Compliant
Standard Ordering Quantities	Multiples of 25 (25 pcs per tray)
Environmental Ratings	ENV08T1
Ordering Part Number	ADCA4012AMLZ

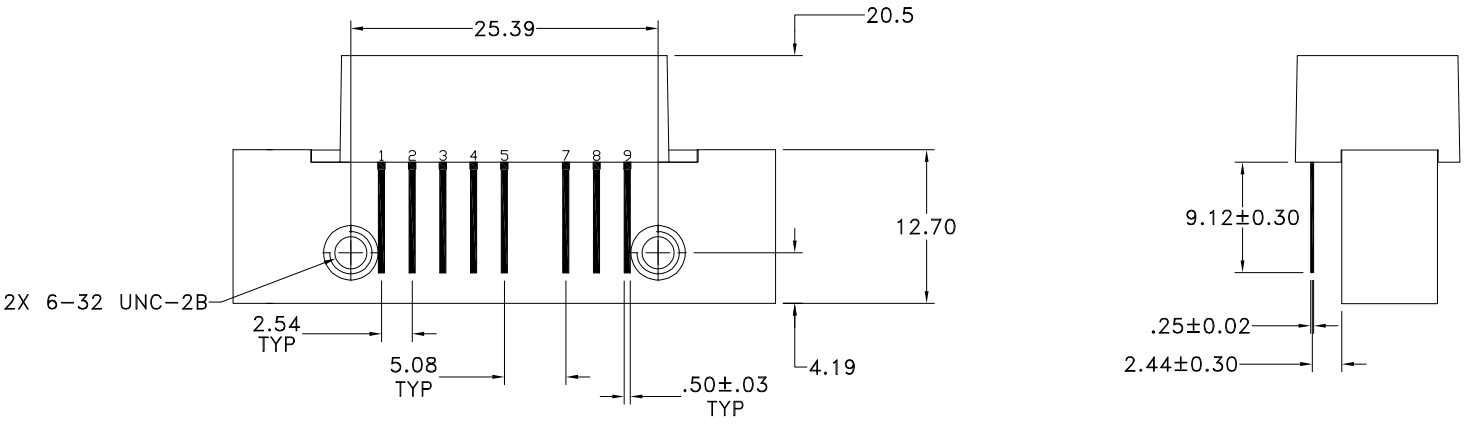
Case Style NP

Outline Dimensions

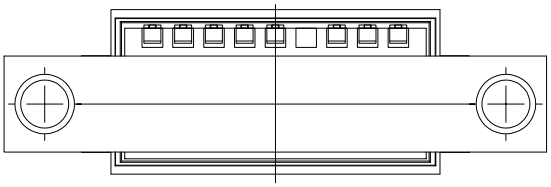
NP3629-3



TOP VIEW



SIDE VIEW



BOTTOM VIEW

Notes:
1. Cover material: Plastic.
2. Heatsink Finish: Electroless Nickel
3. Pin Material: Phosphor Bronze
4. Pin Finish: Gold

Approx. Weight: 12 grams

Dimensions are in mm. Tolerances: X.X = ± 0.5mm Unless Otherwise
X.XX = ± 0.25mm Specified