QLA-9K-26500-30-30

9k~26.5GHz, 30dB, 3.0dB



Features:
* Broadband
* Low Noise

Applications:
* Laboratory Test
* Telecommunication
* Wireless
* Instrumentation

Description

This product series features ultra-wideband low-noise amplifiers (LNAs) operating from 9k to 26.5GHz. The lineup includes:

• LNA modules powered by 12V DC, where increasing supply voltage enhances gain and output power;

• LNA systems with integrated switching-mode power supplies (SMPS) accepting 85-265V AC input, recommended for most applications;

• LNA systems employing linear-regulated power supplies for 220V AC operation, delivering optimal performance where extreme power purity is critical.

Electrical

Frequency:	9k~26.5GHz
Gain:	30dB typ.
Gain Flatness:	±2.5dB typ.
Output Power (P1dB):	24dBm typ.
Output Power (Psat):	25dBm typ.
Noise Figure:	3.0dB typ.
Spurious:	-60dBc max.
VSWR:	2.0 typ.
Reverse Isolation:	-55dB typ.
Voltage:	+12V DC (Outline A) 85~265V AC (Outline B) 220V AC (Outline B)
Current:	280mA typ. (Outline A, B)
Impedance:	50Ω

Absolute Maximum Ratings*1

RF Input Power:	+18dBm
Voltage:	+12.5V

[1] Permanent damage may occur if any of these limits are exceeded.

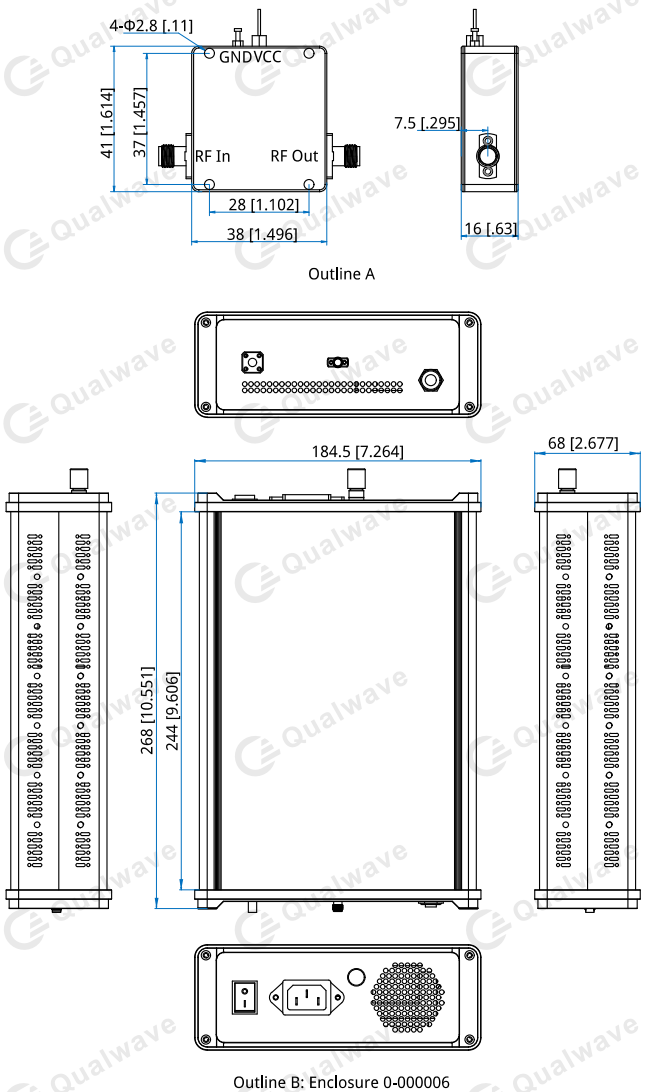
Mechanical

RF Connectors:	SMA Female (Removable)

Environmental

Operating Temperature:	-45~+85℃
Non-operating Temperature:	-55~+125℃

Outline Drawings



Unit: mm [in] Tolerance: ±0.5mm [±0.02in]

How To Order

QLA-9K-26500-30-30 - Outline A

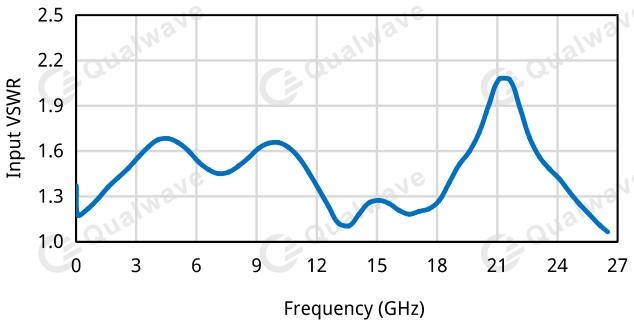
QLAS-9K-26500-30-30 - Outline B, AC-powered unit integrates a switching-mode power supply.

QLAS-9K-26500-30-30-1 - Outline B, AC-powered unit integrates a linear-regulated power supply.

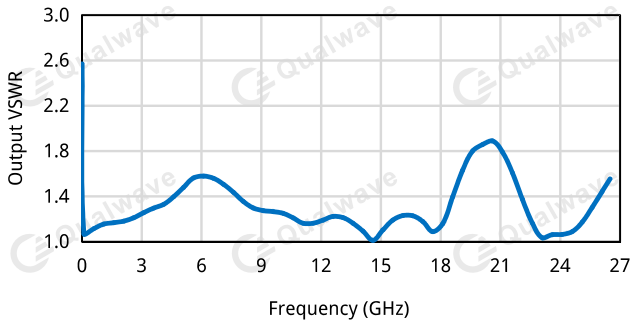
Customization is available upon request.

Typical Performance Curves

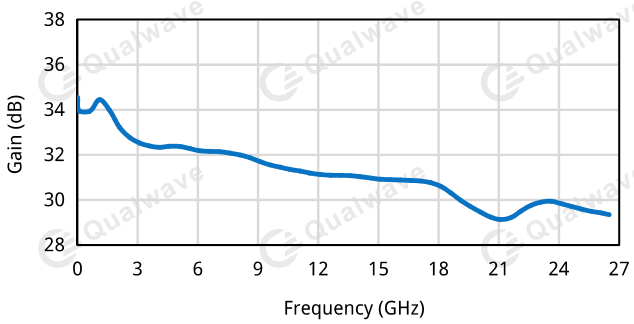
Input VSWR vs. Frequency



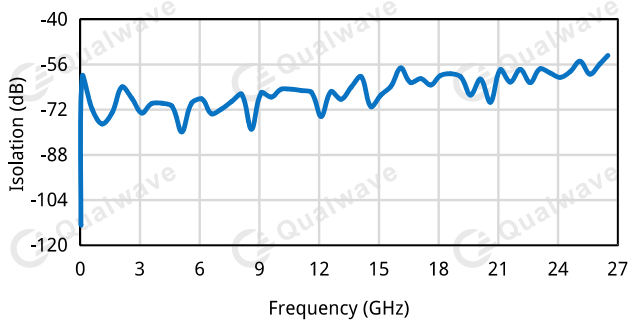
Output VSWR vs. Frequency



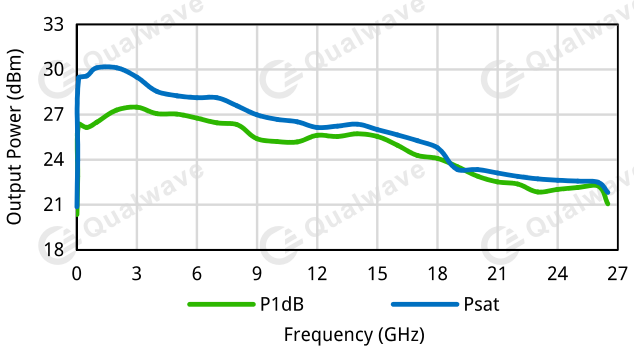
Gain vs. Frequency



Isolation vs. Frequency



Output Power vs. Frequency



Noise Figure vs. Frequency

