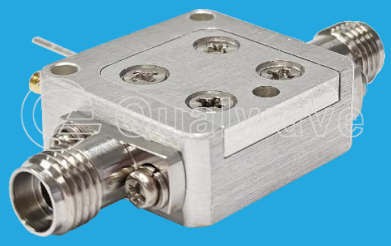
QLA-9K-26500-14-30

9kHz~26.5GHz, 14dB, 3.0dB

Features:
* Broadband
* Low Noise

Applications:
* Wireless
* Receiver
* Laboratory Test
* Radar



Description

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

• LNA modules powered by 8V 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:	9kHz~26.5GHz
Gain:	14dB typ.
Gain Flatness:	±1dB typ.
Output Power (P1dB):	15dBm typ.
Output Power (Psat):	16dBm typ.
Noise Figure:	3.0dB typ.
Spurious:	-60dBc max.
VSWR:	1.8 typ.
Reverse Isolation:	-30dB typ.
Voltage:	+8V DC (Outline A) +85~+265V AC (Outline B) +220V AC (Outline C)
Current:	100mA typ. (Outline A)
Impedance:	50Ω

Absolute Maximum Ratings*1

RF Input Power:	+18dBm
Voltage:	+9V (Outline A)

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

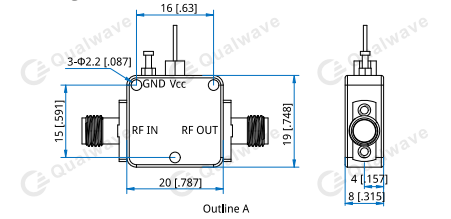
Mechanical

RF Connectors:	SMA Female (Removable)

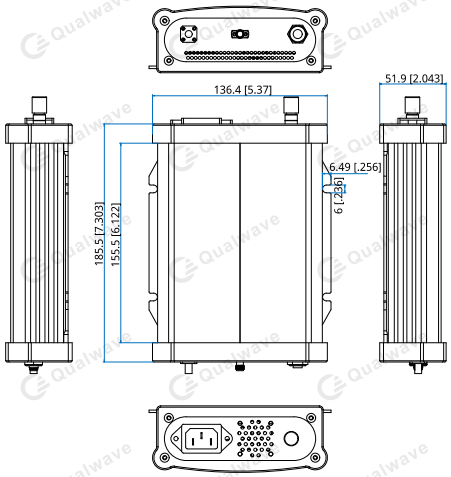
Environmental

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

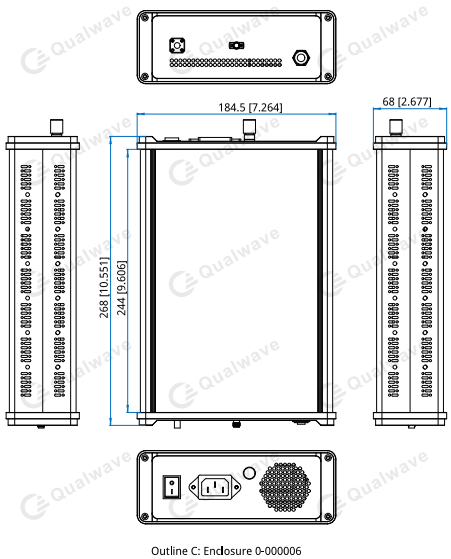
Outline Drawings



Outline A



Outline B: Enclosure 0-000009-V2



Outline C: Enclosure 0-000006

Unit: mm [in]

Tolerance: ±0.2mm [±0.008in]

How To Order

QLA-9K-26500-14-30 - Outline A

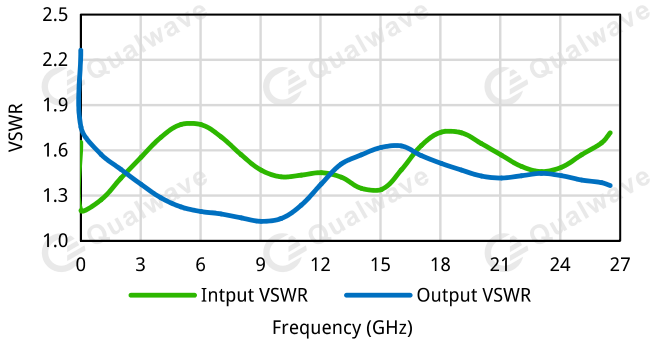
QLAS-9K-26500-14-30 - Outline B, AC-powered unit integrates a switching-mode power supply.

QLAS-9K-26500-14-30-1 - Outline C, AC-powered unit integrates a linear-regulated power supply.

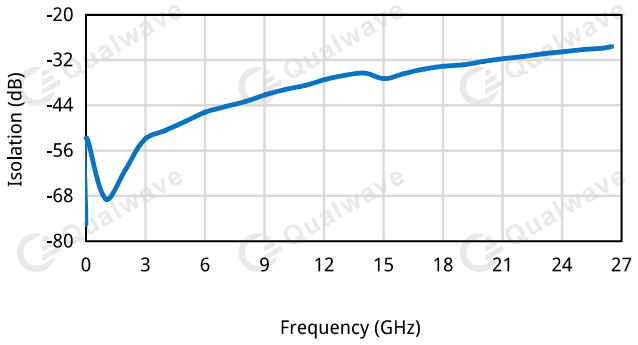
Customization is available upon request.

Typical Performance Curves

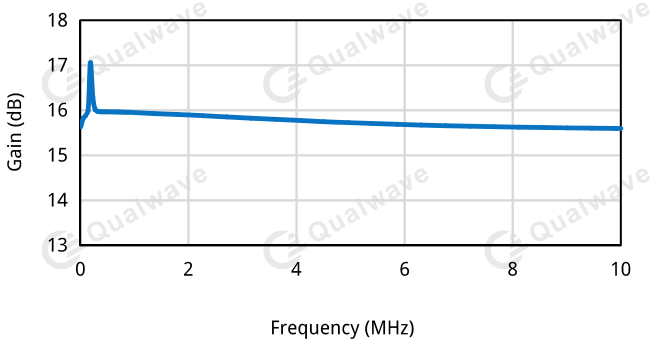
VSWR vs. Frequency



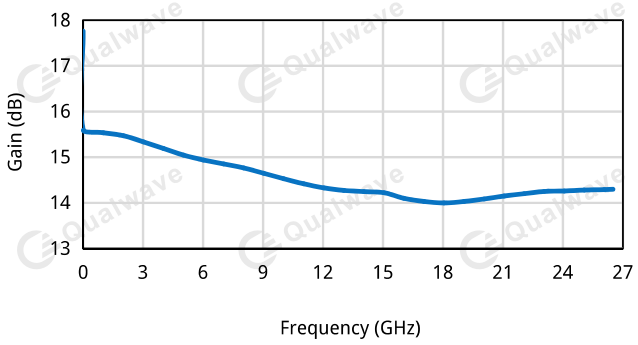
Isolation vs. Frequency



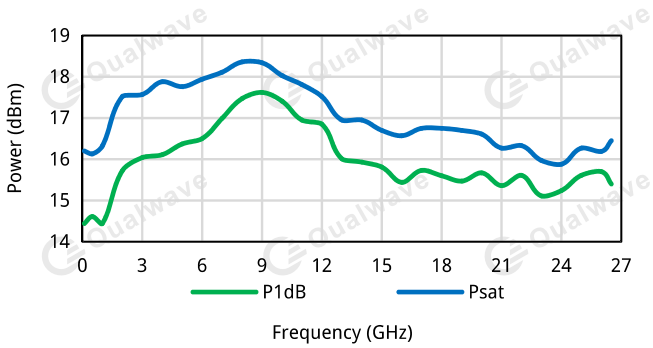
Gain vs. Frequency



Gain vs. Frequency



Power vs. Frequency



Noise Figure vs. Frequency