FLA-100-6000-40-15-L

0.1~6GHz, 40dB, 1.5dB, With limiter

Features:
* Broad Band
* Low Noise

Applications:
* Wireless
* Receiver
* Laboratory Test
* Radar



Description

This product series features ultra-wideband low-noise amplifiers (LNAs) operating from 20MHz to 6GHz. The lineup includes:

• LNA modules powered by 5-15V 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:	0.1~6GHz
Gain:	40dB min.
Gain Flatness:	±2dB typ.
Output Power (P1dB):	19dBm typ.
Noise Figure:	1.5dB typ.
Spurious:	-60dBc max.
VSWR:	2 typ.
Input DC Blocking Voltage:	100V max.
Voltage:	+5V DC (Outline A) +6~12V DC (Outline B) +6~15V DC (Outline C) +85~+265V AC (Outline D) +220V AC (Outline E)
Current:	100mA typ. (Outline A, B, C)
Impedance:	50Ω

Absolute Maximum Ratings*1

RF Input Power:	+37dBm
Voltage:	+5.5V (Outline A) +20V (Outline B) +17V (Outline C)

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

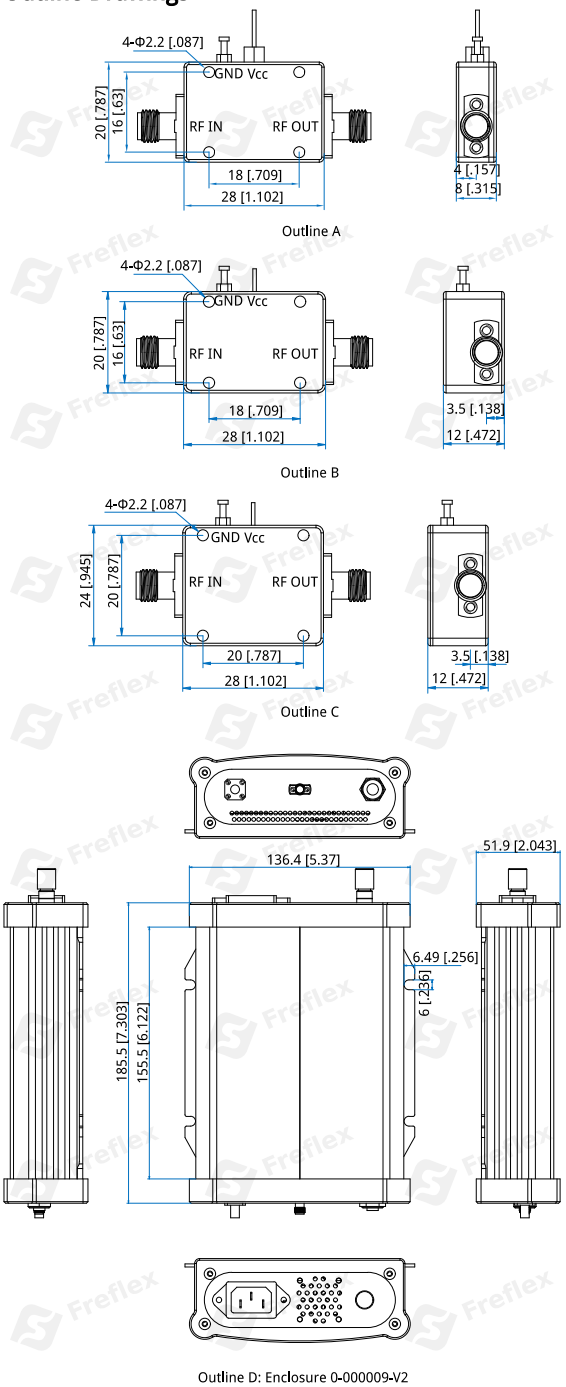
Mechanical

RF Connectors:	SMA Female (Removable)
Mounting:	4-Φ2.2mm through-hole

Environmental

Operating Temperature:	-55~+85°C
Non-operating Temperature:	-55~+125°C

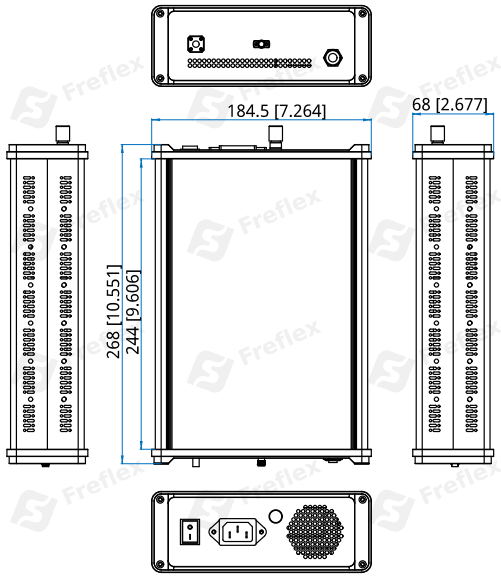
Outline Drawings



How To Order

FLA-100-6000-40-15-L - Outline A
FLA-100-6000-40-15-L-1 - Outline B
FLA-100-6000-40-15-L-2 - Outline C
FLAS-100-6000-40-15-L - Outline D, AC-powered unit integrates a switching-mode power supply.
FLAS-100-6000-40-15-L-1 - Outline E, AC-powered unit integrates a linear-regulated power supply.

Customization is available upon request.

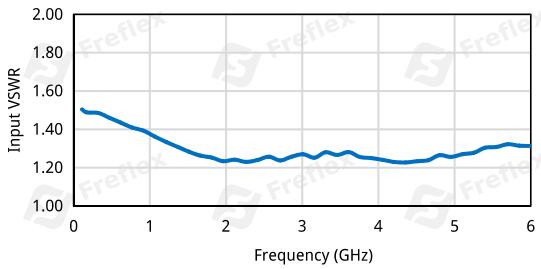


Outline E: Enclosure 0-000006

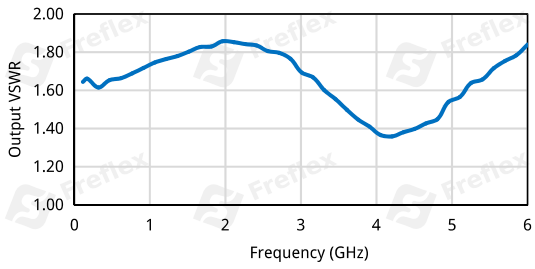
Unit: mm [in] Tolerance: ±0.5mm [±0.02in]

Typical Performance Curves

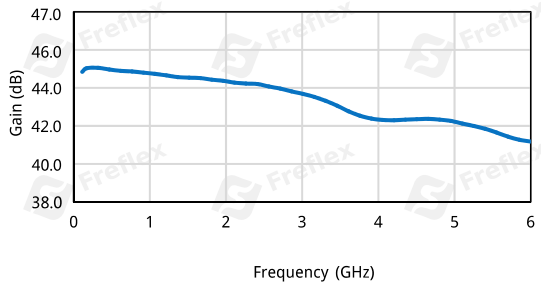
Input VSWR vs. Frequency



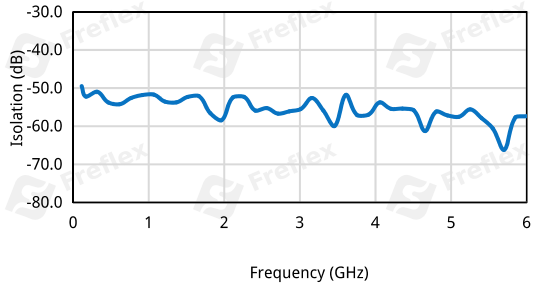
Output VSWR vs. Frequency



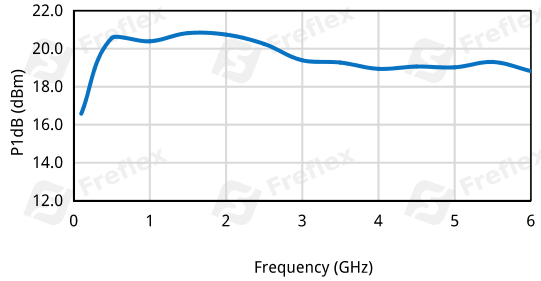
Gain vs. Frequency



Isolation vs. Frequency



P1dB vs. Frequency



Noise Figure vs. Frequency

