



## OEM MICROWAVE POWER AMPLIFIERS

### LEANAMP-2450M-10-M

#### OEM 2400-2500MHz 10W Amplifier

**LEANAMP-2450M-10-M** is a compact **OEM Amplifier** Module conceived for demanding applications requiring state-of-the-art technology, absolute signal purity, high energy efficiency and long-term reliability.

**LEANAMP-2450M-10-M** is a class-AB OEM Power Amplifier developed for easy integration into devices operating in the microwave range **from 2400MHz to 2500MHz** to produce an output power of 10W @1dBc with a 40dB gain and dual 28Vdc and 5Vdc power supply. The module is equipped with a simple analogue user interface for easy monitoring and control.

The Power Amplifier, based on LDMOS technology, is designed for CW and pulsed applications and includes an isolator at the output in order to protect the internal hardware from temporary high VSWR operating conditions.

The OEM module shall be mounted on a heatsink for forced-air cooling by means of a suitable fan, please contact the factory in order to get information about the recommended heatsink and fan depending on the intended operating ambient temperature.

**LEANAMP-2450M-10-M** can be used for applications in ISM devices, in telecommunications or in laboratory environment for scientific experimentation, for measurement or calibration purposes. Top **accuracy** is guaranteed by latest-generation power devices, by real-time measurement of Temperature, Forward Power and Reflected Power and long-term **reliability** is ensured by accurate components selection and careful thermal balance considerations from the beginning of the design phase.

### QUICK OVERVIEW

*Ready for quick integration*

*Dual 28Vdc and 5Vdc power supply*

*High energy efficiency*

*Conceived for forced-air cooling*

*LDMOS technology*

*10W @1dBc*

*40dB gain*

*Integrated output isolator*

*Analogue user interface*

*Real-time measurement of Temperature, Forward and Reflected Powers*

*Ready for continuous and pulsed modes*

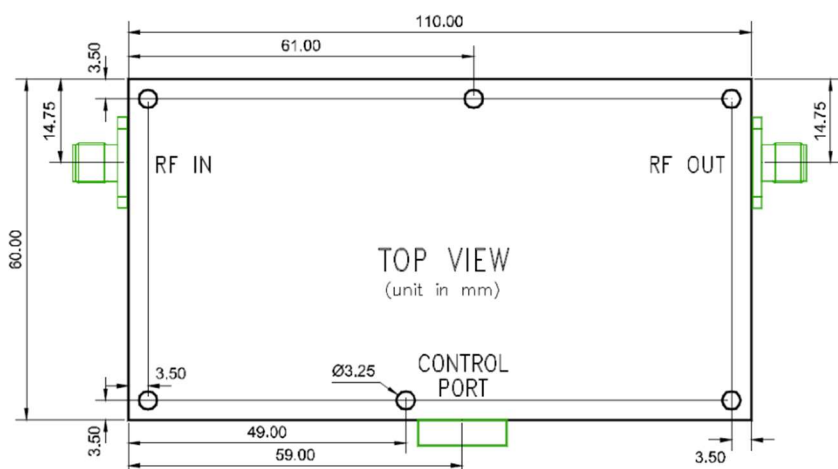
*Top accuracy and long-term reliability*

# LEANFA-2450M-10-M

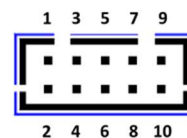
## OEM 2400-2500MHz 10W Amplifier

### Technical Specifications

<b>Frequency Range</b>	2400-2500MHz
<b>Output Power @1dBc</b>	>10W
<b>Max Output Power</b>	>11W
<b>Nominal Input Power</b>	0dBm
<b>Max Input Power</b>	+10dBm
<b>Small-signal Gain</b>	44dB ±1dB
<b>Power Gain</b>	40.5dB ±0.5dB
<b>Output Power in OFF Mode</b>	<10dBm @0dBm input
<b>Input Return Loss</b>	>12dB
<b>Output Return Loss</b>	>18dB
<b>Power Supply 1 Voltage Range</b>	5÷30Vdc (nominal 28Vdc)
<b>Max Power Supply 1 Voltage</b>	32Vdc
<b>Power Supply 2 Voltage Range</b>	5Vdc ±5%
<b>Power Supply 1 Current</b>	900mA @0dBm input
<b>Power Supply 2 Current</b>	350mA @0dBm input
<b>Efficiency (Vdc=28V, in=0dBm)</b>	>40%
<b>Input/Output Impedance/Connector</b>	50Ω/SMA-f
<b>Dimensions</b>	110x60x17mm
<b>Control Connector</b>	HIROSE DF11-10DP-2DS (male 10 pin)



### CONTROL PORT



- 1 GND
- 2 GND
- 3 TEMPERATURE
- 4 CURRENT
- 5 REF POWER
- 6 FWD POWER
- 7 ON/OFF
- 8 +5Vdc
- 9 +28Vdc
- 10 +28Vdc

### READINGS & CONTROL

<b>FORWARD POWER</b>	0-5V
<b>REFLECTED POWER</b>	0-5V
<b>TEMPERATURE</b>	10mV/°C
<b>+28V SUPPLY CURRENT</b>	2.5V +0.5V/A
<b>ON FLOATING - OFF GND</b>	



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