



# TECHNICAL BULLETIN

**BROADBAND HI POWER RF AMPLIFIER**

**E11014-01-05**

**REV.  
A**

Designed for Wide-band High Power application in the V-UHF range. This high reliability amplifier utilises class AB Silicon RF Power LDMOSFET devices that provide high broadband gain, wide dynamic range and good amplitude modulation characteristics. The amplifier includes an internal circuit that provide the external Voltage Control of Gain for AM modulation or external ALC features. High efficiency, reliable operation and Flat gain are being achieved by employing unique broadband RF networks, custom machined housing and heavy duty components. Each unit undergoes extensive burn-in prior to final test and Q/A.

## Absolute Maximum Ratings

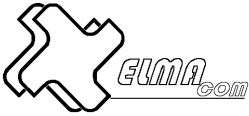
Parameter	Rating	Units
Supply Voltage	30	Vdc
Input Current	8	A
Operating Temperature	-40 to + 90	°C
Storage Temperature	-54 to +125	°C

## Electrical Characteristics @ T = 25 °C & VDD = 24.0 Vdc

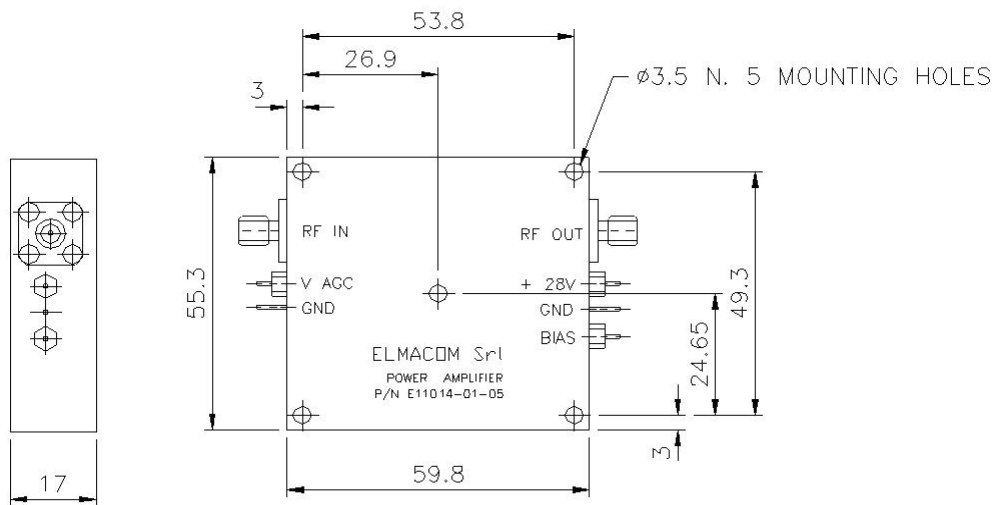
Parameter	Values		Units
Frequency Range	100 - 400	min	MHz
Output Power @ 1 dB comp.	25	min	W
Output Power @ saturation	80	min	W
Small Signal Gain	43	min	dB
Gain Flatness	+/- 2.5	max	dB
Noise Figure	12	max	dB
2 <sup>nd</sup> Harmonic @ 1 dB comp	- 25	min	dBc
3 <sup>rd</sup> Harmonic @ 1 dB comp	- 15	min	dBc
V AGC Input @ 50 mA	0 - 10		V
Gain Control Dynamic Range	60	min	dB
V Bias	5 +/- 0.2		V
Input/Output VSWR	3 : 1	max	

### ELMACOM srl

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**OUTLINE DRAWING “Adequate Heatsink Required”**



**Dimensions in mm**

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