



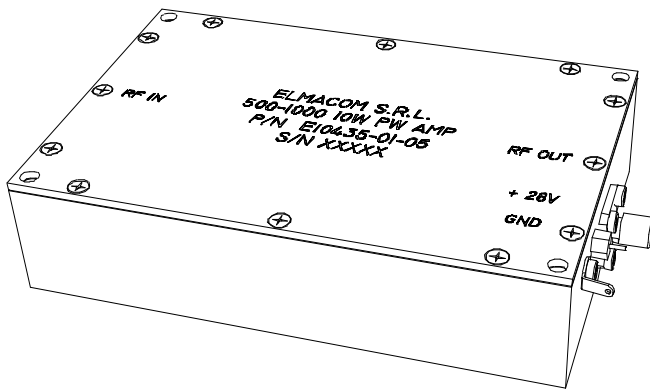
TECHNICAL BULLETIN

UHF BROADBAND POWER AMPLIFIER

E10550-01-05

REV.A

This wideband UHF, power amplifier module is designed for military and commercial transmitter applications. This specification describes a multistage class A CW amplifier which incorporates gold-metallized, SI MOSFET transistor for high reliability, and provides more of 50 Watts C.W. over the **entire** frequency range with a typical 55 dB of power gain.



Features

- Broadband Operation 500 to 850 MHz
- Usable from 500 to 1000 MHz
- 50 Watts CW
- More than 55 dB gain
- Rugged Push-pull FET Design
- Built to MIL Standards
- Miniature Dimensions
- High Efficiency

Absolute Maximum Ratings

Parameter	Rating	Units
Supply Voltage	30	V dc
Input Power	0	dBm
Output Power	50	W
Operating Temperature	- 40 to + 85	°C
Storage Temperature	- 54 to + 125	°C

ELMACOM srl

Via delle Genziane s.n.c 00012 Guidonia, Rome - Italy
Phone: +39 (0774) 379296 Fax: +39 (0774) 353442
E-mail : info@elmacom.com Website : www.elmacom.com



TECHNICAL BULLETIN

UHF BROADBAND POWER AMPLIFIER

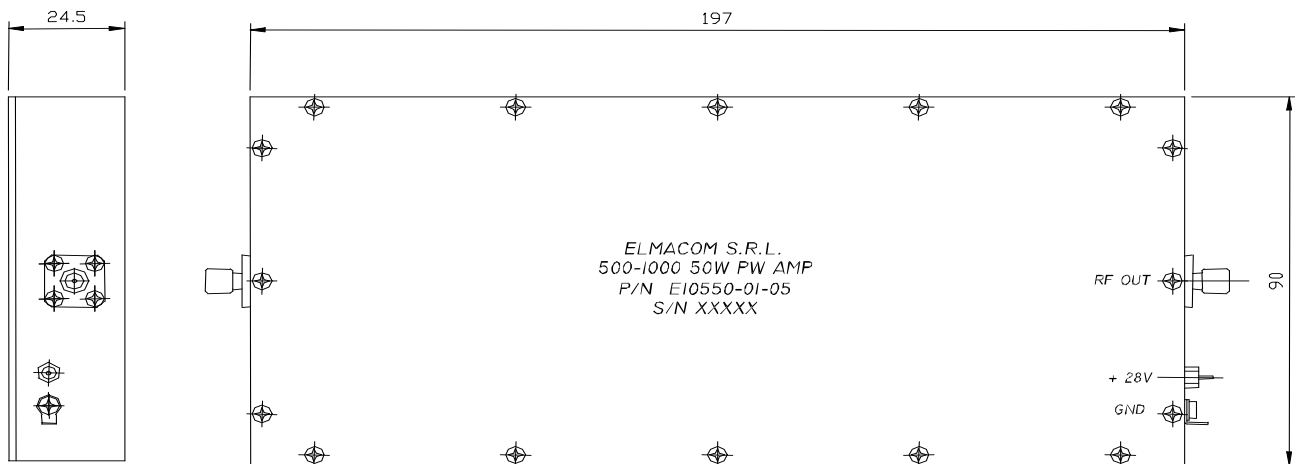
E10550-01-05

REV.A

Electrical Characteristics at 25°C

Parameter	Units	Min	Typ.	Max	Test Conditions
Output Power (CW)	W	50	65	80	Vcc=28V, Pin = -10 dBm, Load=50 Ω
Power Gain	dB		55		Vcc=28V, Pin = -10 dBm, Load=50 Ω
Input VSWR	VSWR		1,3:1	1,6:1	Vcc=28V, Pin = -10 dBm, Load=50 Ω
Load Mismatch Tolerance	VSWR	3.3:1	5:1		Tc=85°C, F=850 MHz, Pout at max, all angles min.
Gain Variation With Freq.	DB		+/-1	+/-1.5	Vcc=28V, Pin = -10 dBm, Load=50 Ω
Even Harmonics	dBc		-30	-25	Vcc=28V, Pout = 50 Watts, Load=50 Ω
Odd Harmonics	dBc		-16	-14	Vcc=28V, Pout = 50 Watts, Load=50 Ω
Spurious Output	dBc		-95	-80	Vcc=28V, Pout = 50 Watts, Load=50 Ω
Efficiency	%	20	25		Vcc=28V, Pout = 50 Watts, Load=50 Ω

OUTLINE DRAWING "Adequate Heatsink Required"



Dimensions in mm

ELMACOM srl

Via delle Genziane s.n.c 00012 Guidonia, Rome - Italy
 Phone: +39 (0774) 379296 Fax: +39 (0774) 353442
 E-mail : info@elmacom.com Website : www.elmacom.com