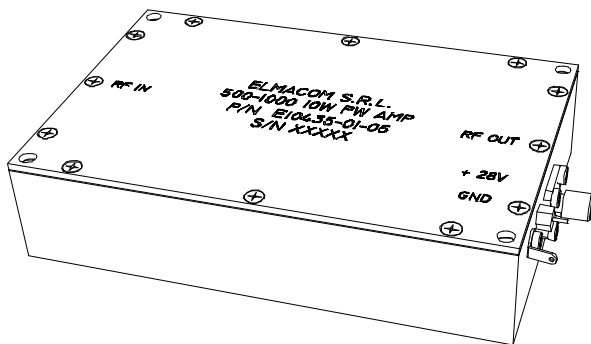




This wideband UHF, power amplifier module is designed for military and commercial transmitter applications. This specification describes a multistage class A CW amplifier which incorporates gold-metallized, SI MOSFET transistor for high reliability, and provides more than 20 Watts CW over the **entire** frequency range with a typical 43 dB power gain.



Features

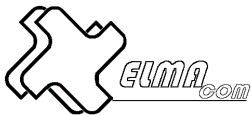
- Broadband Operation 500 to 1000 MHz
- Usable from 450 to 1050 MHz
- 20 Watts CW
- More than 40 dB gain
- Rugged Push-pull FET Design
- Built to MIL Standards
- Miniature Dimensions
- High Efficiency

Absolute Maximum Ratings

| Parameter | Rating | Units |
|-----------------------|-------------|-------|
| Supply Voltage | 30 | Vdc |
| Input Power | + 7 | dBm |
| Output Power | 25 | W |
| Operating Temperature | -40 to + 85 | °C |
| Storage Temperature | -54 to +125 | °C |

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TECHNICAL BULLETIN

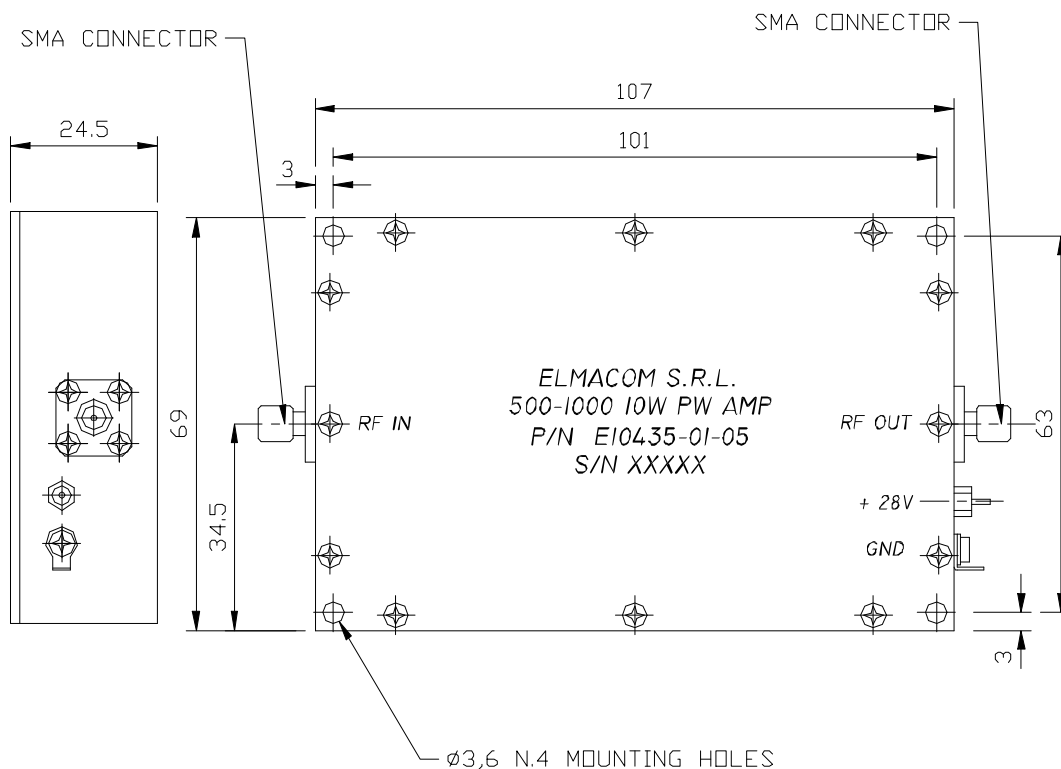
UHF BROADBAND MEDIUM POWER AMPLIFIER

E10435-01-05

REV.A

Electrical Characteristics at 25°C

| Parameter | Units | Min | Typ. | Max | Test Conditions |
|---------------------------|-------|-------|-------|--------|--|
| Output Power (CW) | W | 15 | 18 | 25 | Vcc = 28V, Pin = + 0 dBm, Load = 50 Ω |
| Power Gain | dB | 40 | 43 | | Vcc = 28V, Pin = + 0 dBm, Load = 50 Ω |
| Input VSWR | VSWR | | 1,3:1 | 1,6:1 | Vcc = 28V, Pin = + 0 dBm, Load = 50 Ω |
| Load Mismatch Tolerance | VSWR | 3.3:1 | 5:1 | | Tc = 85°C, F = 960MHz, Pout max, all angles min. |
| Gain Variation With Freq. | DB | | +/-1 | +/-1.5 | Vcc = 28V, Pin = + 0 dBm, Load = 50 Ω |
| Even Harmonics | dBc | | -30 | -25 | Vcc = 28V, Pout = 10 Watts, Load = 50 Ω |
| Odd Harmonics | dBc | | -16 | -14 | Vcc = 28V, Pout = 10 Watts, Load = 50 Ω |
| Spurious Output | dBc | | -95 | -80 | Vcc = 28V, Pout = 10 Watts, Load = 50 Ω |
| Efficiency | % | 20 | 25 | | Vcc = 28V, Pout = 20 Watts, Load = 50 Ω |



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