

PLT01-500L



*50W ATV / 10W DVBT
Band I Amplifier*

GENERAL INFORMATION

Designed for band I amplification as final and driver stage, it includes only one device capable of 50W RF output. The RF module is provided of the simple processing to satisfy all typical controls necessary for driver application in the high power amplification chain, by processing and managing the signals of Power input , Power gain adjustment, Phase in/out adjustment, RF switch-off.

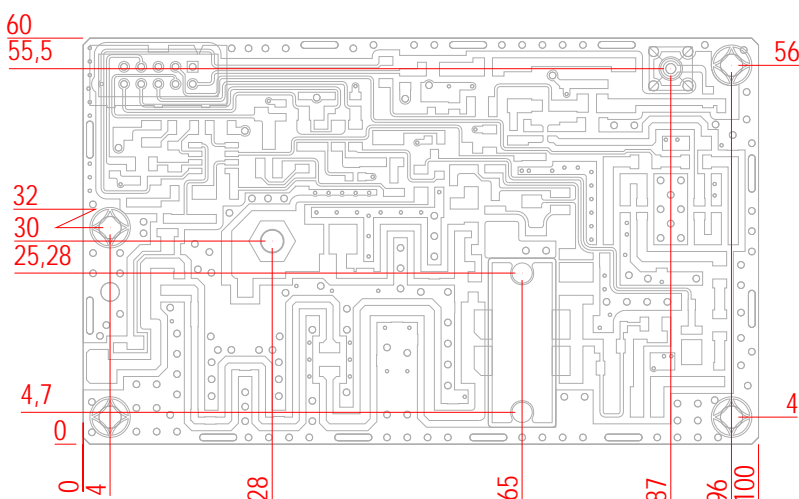
TECHNICAL SPECIFICATIONS ($t_h = 25\text{ }^\circ\text{C}$; $50\text{ }\Omega$ loaded ; $V_{dc} = +48\text{V}$)

- Frequency range: 47 to 88 MHz
- Class operation: AB
- Input - output impedance: $50\text{ }\Omega$
- Input return loss: $\geq 15\text{ dB}$
- Input power: 0.5W max.
- Output power: 50W p.s. (10W DVB)
- Harmonics: $\leq 30\text{dB}$
- Power supply requirement: +48 Vdc $\pm 2\%$; 4A max.; +12V ; -5 Vdc 0.1A max
- Drain efficiency: $\geq 35\text{ \%}$ @ 50W CW
- Heat sink requirement: $\leq 0.3\text{ }^\circ\text{C/W}$
- RF connection: Input SMB jack ; Output solder post
- Operating temperature: -5°C to $+45^\circ\text{C}$
- Relative humidity: 20% to 90% non-condensing
- Dimensions: 60 x 100 x 15mm
- Weight: 100 gr.

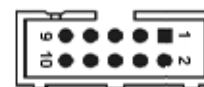
Controls

- Power input detection: +3V = 0.5W input
- Power output detection: +3V = 50W output
- Power gain: -5 to +10V = 20dB range
- Phase in/out: +4 to +24V = 60° range
- RF switch-off: close contact to GND

RF MODULE LAYOUT



J2 Connector IDC10



pin	Description	pin	Description
1	GND	6	Gain adj
2	NC	7	RF Out detector
3	Phase adj	8	RF Off control
4	RF IN detector	9	-5V input
5	NC	10	+12V input