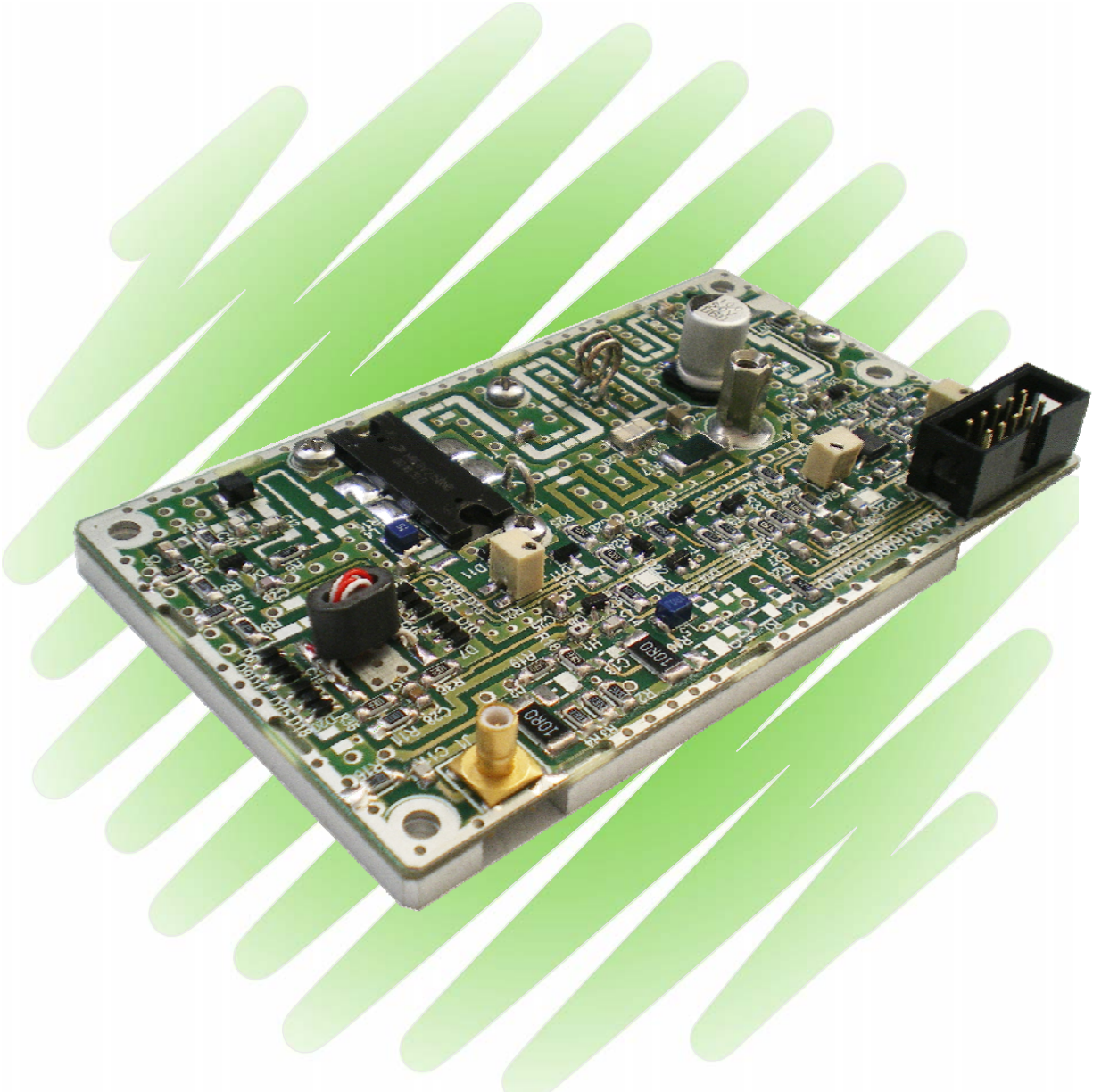


PLT02-101S



*100W Band II FM
Amplifier*

GENERAL INFORMATION

Designed for band II FM amplification as final and driver stage, it includes only one device capable of 100W 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.

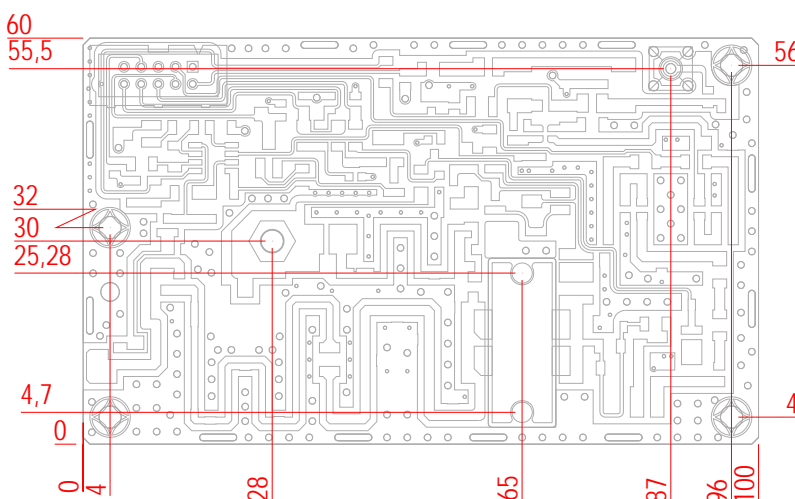
TECHNICAL SPECIFICATIONS ($t_h = 25\text{ }^\circ\text{C}$; $50\ \Omega$ loaded ; $V_{dc} = +48\text{V}$)

- Frequency range: 87 to 110 MHz
- Class operation: B saturation
- Input - output impedance: $50\ \Omega$
- Input return loss: $\geq 15\ \text{dB}$
- Input power: 2W to 4W max.
- Output power: 100W CW
- Harmonics: $\leq 30\text{dB}$
- Power supply requirement: $+48\ \text{Vdc} \pm 2\%$; 4A max.; $+12\text{V}$; $-5\ \text{Vdc}$ 0.1A max
- Drain efficiency: $\geq 60\ \%$ @ 100W 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.

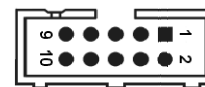
Controls

- Power input detection: $+3\text{V} = 4\text{W}$ input
- Power output detection: $+3\text{V} = 100\text{W}$ output
- Power gain: -5 to $+10\text{V} = 20\text{dB}$ range
- Phase in/out: $+4$ to $+24\text{V} = 60^\circ$ 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