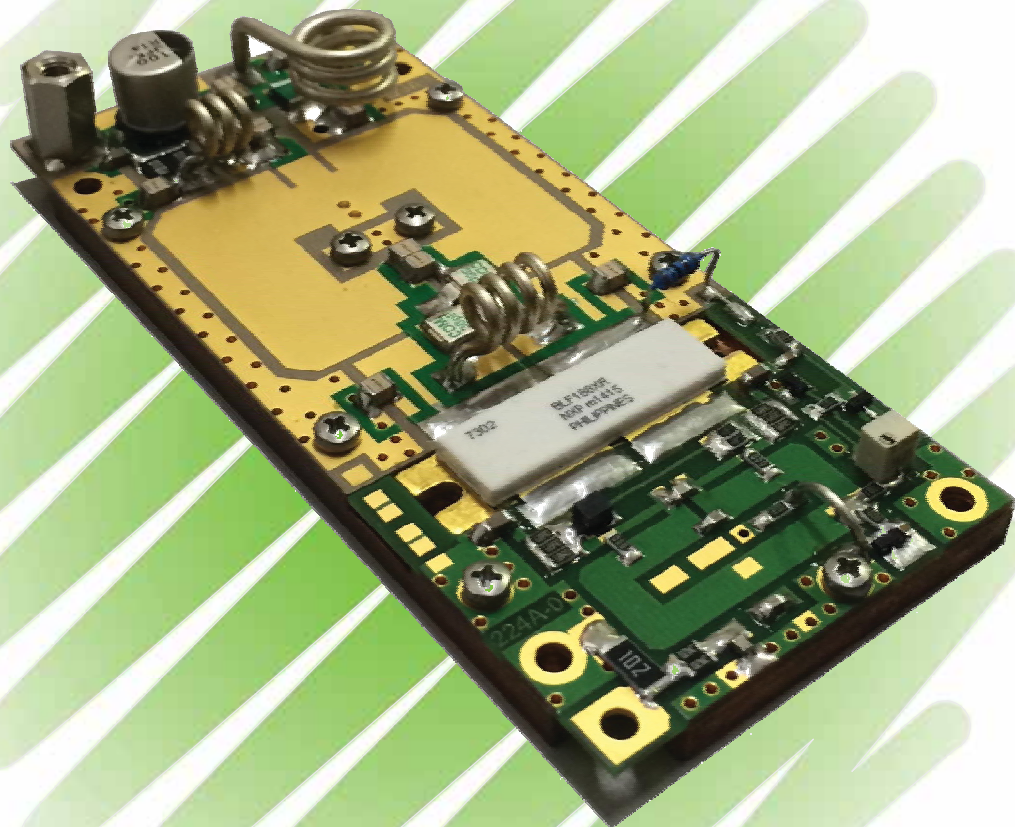


PLT11-122S



1200W
81,25MHz Amplifier

ISM CW AMPLIFIER

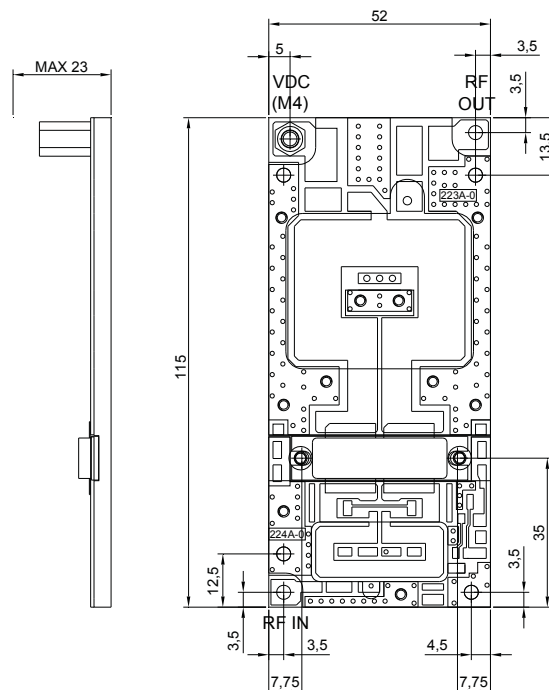
GENERAL INFORMATION

The PLT11-122S power amplifier operates at frequency of 81,25 MHz and it is rated for continuous duty at an RF output power of 1200 Watts. It is mainly designed as final power stage and it uses a single last generation LDMOS device capable of 1200 W RF output. The module is realized with a very compact layout to maximize the number of pallet in high power amplifiers and include the bias circuits, matching network and circuits for stabilization of the operating point. The configuration of the amplifier is a “push-pull” stage coupled by means of the combining network fully integrated in the RF block. This design allows obtaining broadband high efficiency and extremely low harmonic emissions.

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

- Output power : $\geq 1200\text{ W CW @1dB c.p.}$
- Power Gain: $\geq 23\text{ dB (@ full power) 5 W}$
(nominal)
- Input power: 81,25 MHz $\pm 5\text{MHz}$
- Frequency range: AB
- Class operation: 32 typical
- Drain current: $> 75\%$ (@ 1200W CW; 1dB c.p.)
- Drain efficiency: $\geq 15\text{ dB}$
- Input return loss: $\pm 5^\circ$ max typical
- Insertion phase variation: $\pm 0.5\text{ dB max}$
- Gain variation: $\leq 40\text{dBc}$
- Harmonic emissions: 50Vdc $\pm 2\%$; 35A max.
- Power supply requirement : $\leq 0.05\text{ }^\circ\text{C/W}$
- Heat sink requirement :
- Operating temperature : $-5^\circ\text{C to }+45^\circ\text{C}$
- Heatsink temperature: $-5^\circ\text{C to }+75^\circ\text{C}$
- Dimensions: 115 x 52 x 25mm
- Weight: 250 gr

RF MODULE LAYOUT



170313

ISM CW AMPLIFIER