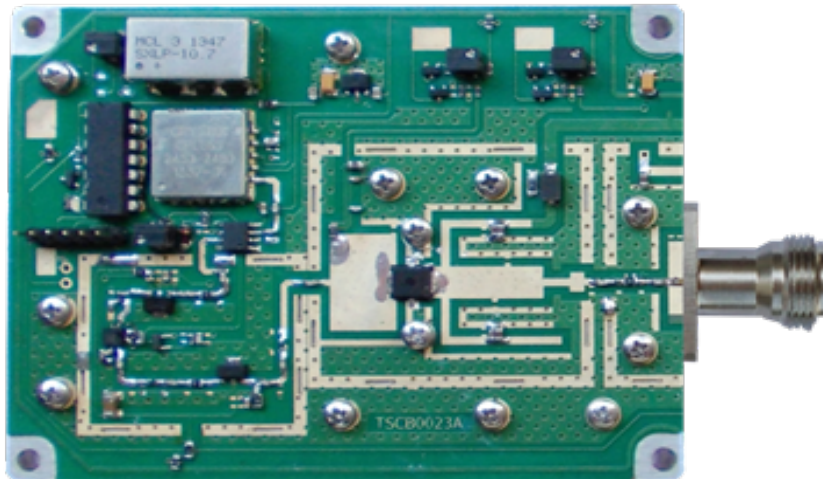


ITC 001ISM

2.45GHz 10W RF Generator



General Description

This RF power generator is designed for ISM application, suitable for standalone amplifier as well as a driver of high power solid state generator. The amplifier section is equipped with the latest and most reliable LDMOS device, to ensure high efficiency, high gain with relevant ruggedness. It is based on printed microstrip technology, to ensure low phase and gain spread unit to unit. RF signal generation is composed by a very stable PLL, operating frequency is selectable by serial interface. This generator can be used in PWM mode or frequency agility mode.

Typical Applications:

- Industrial Heating
- Plasma Generator
- Medical
- Microwave Furnaces
- Particle Accelerators
- RF Lighting
- Microbiological Testing
- Wideband data transmission system

Main Characteristics

Frequency	2.4 to 2.5 GHz
Pout	10W (adj 0-10W)
Phase Noise	-50 dBc/Hz Std, -80 on request
Operating	B class
Supply	28V nominal
Control	Frequency, Level and Mute

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Technical Specifications

Frequency Range	2425 ÷ 2475MHz
Frequency step	0.1MHz
Output Power	10W
Power Regulation	0-10W
Supply Voltage	+30Vdc
Efficiency	≥ 10%
Current	2Amps
Output Matching	≥12dB
Load Mismatch	10:1 full phase
Phase Noise	-50dBc/Hz
Frequency Stability	10ppM

Mechanical

Dimensions (LxWxH)	105 mm x 80 mm x 30 mm (4.133" x 3.149" x 1.181")
RF Out connection	Solder tab, N connector on request
DC feed connection	Solder Tab
Carrier	Aluminum
Weight	0.2Kg

Environmental

Operating temperature	0-70 °C (carrier temperature)
Storage temperature	-20 + 80°C (ambient temperature)
Humidity	up to 90% no condensing

Screws Type

Screws point 1-2-3-4 M3 Socket head cap screws

4x split lock washers WZ ø 3.5

4x flat washers WZ ø 3.5

Thermal Compound

Recommended Dow Corning 340 (thermal compound)

or equivalent

Ordering Code

ITC001ISM

Mechanical Layout

