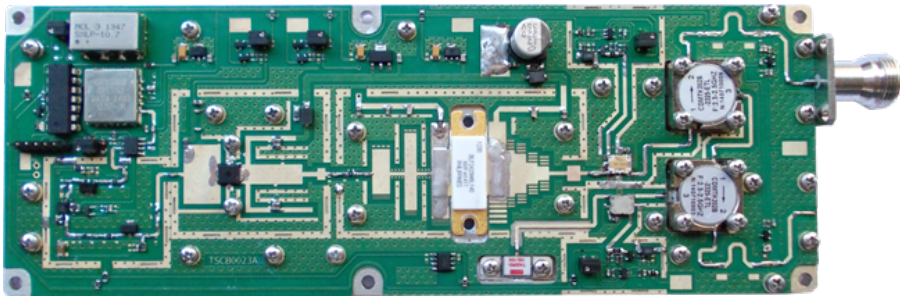
ITC 002ISM

2.45GHz 120W 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	120W (adj 5-120W)
Phase Noise	-50 dBc/Hz Std, -80 on request
Operating	B class
Supply	28V nominal
Control	Frequency, Level and Mute
Measure	FWD and REF

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Technical Specifications	
Frequency Range	2425 ÷ 2475MHz
Frequency step	0.1MHz
Output Power	130W
Power Regulation	5-130W
Supply Voltage	+30Vdc
Efficiency	≥ 30%
Current	10Amps
Output Matching	16dB
Load Mismatch	∞ full phase
Phase Noise	-50dBc/Hz
Frequency Stability	10ppM

Mechanical	
Dimensions (LxWxH)	228 mm x 80 mm x 30 mm (8.976'' x .149'' x 1.181'')
(8.976'' x .149'' x 1.181'')	Solder tab, N connector on request
DC feed connection	Solder Tab
Carrier	Copper
Weight	0.6Kg

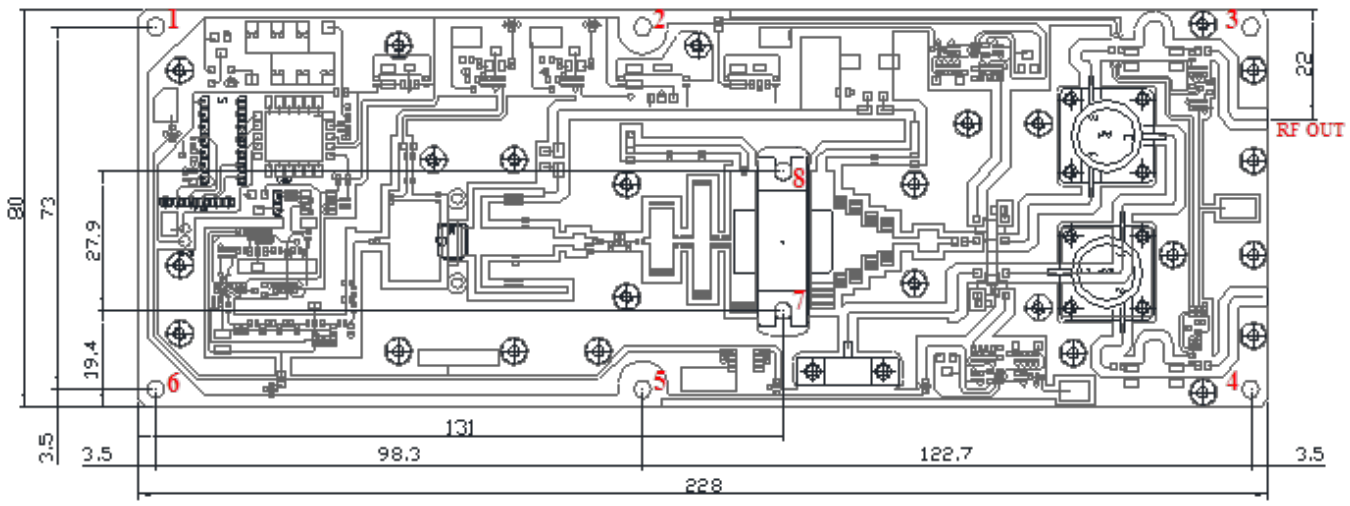
Environmental	
Operating temperature	*0-70 °C (carrier temperature)*
Storage temperature	*-20 + 80°C (ambient temperature)*
Humidity	*up to 90% no condensing*

Screws Type
Screws point 1-2-3-4-5-6-7-8 M3 Socket head cap screws
8x split lock washers WZ ø 3.5
8x flat washers WZ ø 3.5

Thermal Compound
Recommended Dow Corning 340 (thermal compound) *or equivalent*

Ordering Code
ITC002ISM

Mechanical Layout



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