

# ITC 003ISM

## 2.45GHz 300W RF Generator



### General Description

This power amplifier is designed for ISM applications, where high power and coherent signal are required. This amplifier uses the latest and most reliable LDMOS device, to ensure high efficiency, high gain with relevant ruggedness. This amplifier is based on printed microstrip technology, to ensure low phase and gain spread unit to unit, making simple the parallel configurations.

### Typical Applications:

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

### Main Characteristics

<b>Frequency</b>	2.4 to 2.5 GHz
<b>Pout</b>	300W (adj 0-300W)
<b>Efficiency</b>	50% min
<b>Gain</b>	15 dB typ.
<b>Operating</b>	B class
<b>Supply</b>	28V nominal
<b>Control</b>	Frequency, Level and Mute
<b>Measure</b>	FWD and REF

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## 2.45GHz 300W High RF Generator

### Technical Specifications (typical)

Frequency Range	2425 ÷ 2475MHz
Output Power	300W
Power Gain	15 dB
Supply Voltage	28V
Efficiency	50%
Quiescent Current	0.3 A
Input R Loss	-18dB
Load Mismatch	10:1 full VSWR
Load Mismatch	∞ full phase
Phase Noise	-50dBc/Hz
Frequency Stability	10ppM

### Mechanical

Dimensions (LxWxH)	154.5 mm x 77.5 mm x 30 mm 6.082'' x 3.051'' x 1.181''
RF In/Out connection	Solder tab
DC feed connection	Screw
Carrier	Copper
Weight	0.5Kg

### Environmental

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

### Screws Type

Screws point 1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18 M3  
Socket head cap screws

18x split lock washers WZ  $\phi$  3.5

18x flat washers WZ  $\phi$  3.5

### Thermal Compound

Recommended Dow Corning 340 (thermal compound)

or equivalent

### Ordering Code

ITC003ISM

## Mechanical Layout

