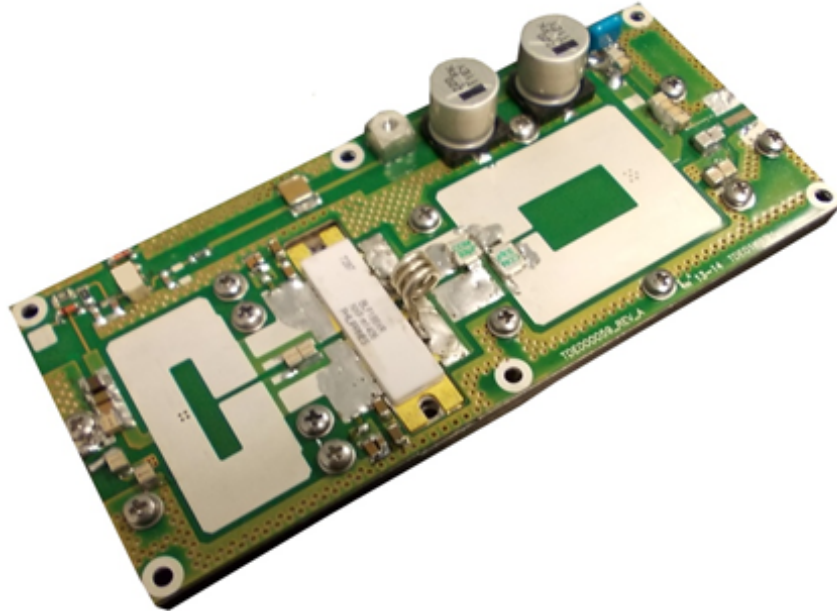


# ITC 004ISM

## 80-120MHz 1000W High power RF Amplifier



### 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. The design of this amplifier is based on microstrip transformer.

### Typical Applications:

- Industrial Heating
- Medical
- Plastic welding
- Defrosting system
- Industrial tissue drying

### Main Characteristics

|                   |                     |
|-------------------|---------------------|
| <b>Frequency</b>  | 80 to 120 MHz       |
| <b>Pout</b>       | 1000W (adj 0-1000W) |
| <b>Efficiency</b> | 75% min             |
| <b>Gain</b>       | 23 dB typ.          |
| <b>Operating</b>  | B class             |
| <b>Supply</b>     | 48V nominal         |

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## 80-120MHz 1000W High power RF Amplifier

### Technical Specifications

|                   |                     |
|-------------------|---------------------|
| Frequency Range   | 80-120MHz           |
| Output Power      | 1000W               |
| Power Gain        | 23 dB               |
| Supply Voltage    | 48V                 |
| Efficiency        | 75%                 |
| Quiescent Current | 0.3 A               |
| Input R Loss      | -15dB               |
| Load Mismatch     | 2:1 full phase VSWR |

### Mechanical

|                      |  |
|----------------------|--|
| Dimensions (LxWxH)   | 135x60x30mm<br>(5.31" x 2.36" x 1.18") |
| 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 | M3 Socket head cap screws        |
| 8x                           | split lock washers WZ $\phi$ 3.5 |
| 8x                           | flat washers WZ $\phi$ 3.5       |

### Thermal Compound

|  |
|--|
| Recommended Dow Corning 340 ( thermal compound ) |
| or equivalent                                    |

### Ordering Code

ITC004ISM

## Mechanical Layout

