

ITC 005ISM

35-80MHz 1500W 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.

This amplifier is suitable for use in CW or pulsed mode in the entire operative band.

Typical Applications:

- Industrial Heating
- Medical
- Wind profiler
- PMR
- Industrial tissue drying
- Meteor scatter communications
- Radio astronomy

Main Characteristics

| | |
|--------------------|---------------------|
| Frequency | 35 to 80 MHz |
| Pout CW | 500W (adj 0-500W) |
| Pout Pulsed | 1500W (adj 0-1500W) |
| Efficiency | 65% min |
| Gain | 27 dB typ. |
| Operating | B class |
| Supply | 48V nominal |

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Technical Specifications

| | |
|-------------------|----------------------|
| Frequency Range | 35-80MHz |
| Output Power | 1500W pulsed |
| Power Gain | 27 dB |
| Supply Voltage | 48V |
| Efficiency | 65% |
| Quiescent Current | 1 A |
| Input R Loss | -15dB |
| Load Mismatch | 10:1 full phase VSWR |

Mechanical

| | |
|----------------------|----------------------------------|
| Dimensions (LxWxH) | 160x104x40mm 6.3"x4.09"x1.57" |
| RF In/Out connection | Solder tab |
| DC feed connection | Screw |
| Carrier | Alluminium |
| 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 ϕ 3.5
18x flat washers WZ ϕ 3.5

Thermal Compound

Recommended Dow Corning 340 (thermal compound)
or equivalent

Ordering Code

ITC005ISM

Mechanical Layout

