

MPA Series

270-470MHz 4W RF Power Amplifier

Features

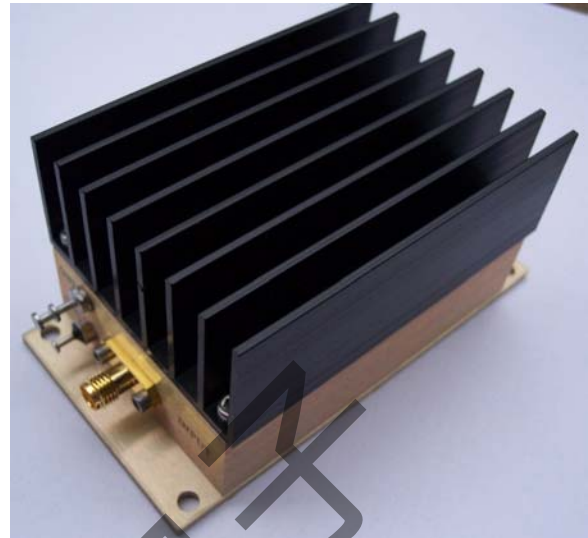
- Frequency Range: 270-470MHz
- Gain: 35dB
- P_{out}: +36dBm
- IP3: +45dBm
- Noise Figure: 6dB
- DC Power: 9V
- SMA Connector

Performance measured @ 370MHz

Description

MPA-370 is a 4Watt (+36dBm) output RF Power Amplifier operating from single 9V DC power supply with frequency from 270MHz to 470MHz.

Picture



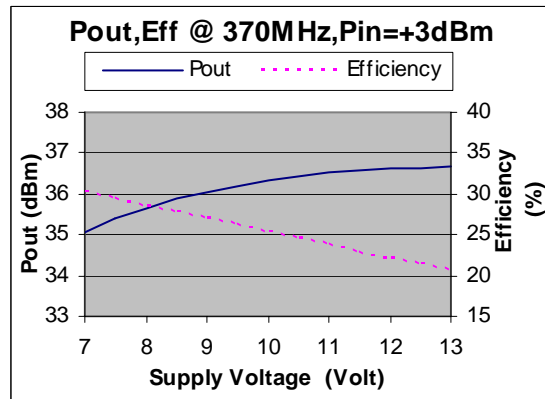
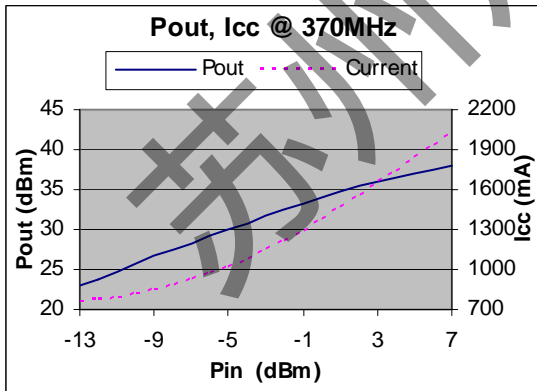
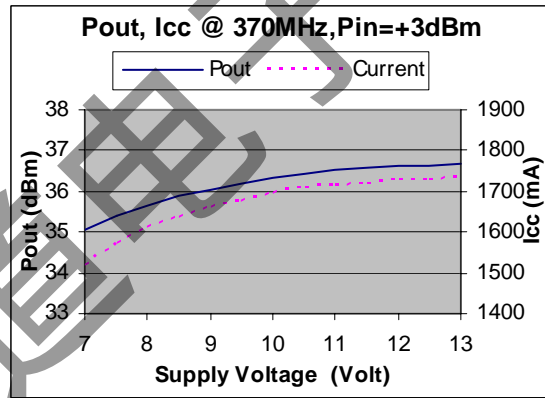
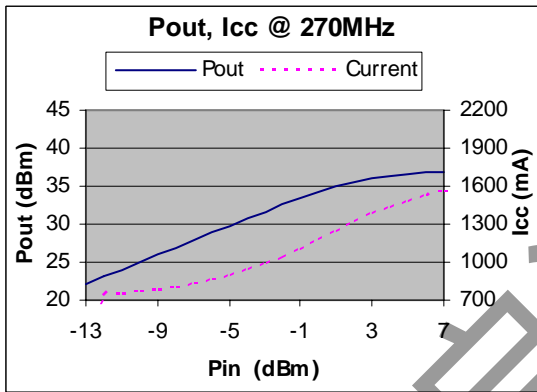
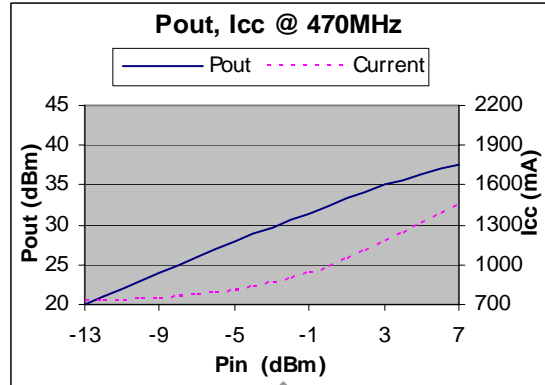
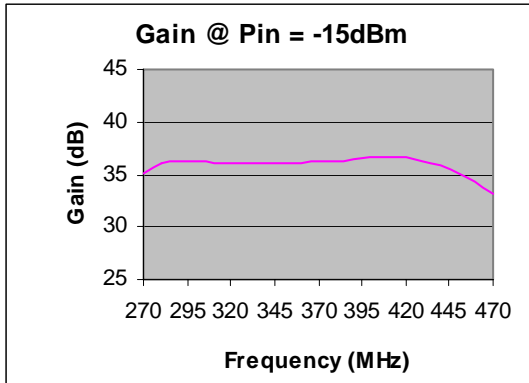
Electrical Specifications @ +25 °C, Z_S = Z_L = 50 Ω, V_{cc} = 9V

| Parameter | Unit | Minimum | Typical | Maximum |
|---|------|--------------------------|---------|---------|
| Frequency Range | MHz | 270 | | 470 |
| Small Signal Gain | dB | | 35 | |
| Output Power P _{out} @ P _{in} = +3dBm | dBm | | +36 | |
| IP3 | dBm | | +45 | |
| Reverse Isolation | dB | | -70 | |
| Noise Figure | dB | | 6.0 | |
| Efficiency at P _{out} = +36dBm | % | | 25 | |
| VSWR | | | | |
| Input | | | 1.3:1 | |
| Output | | | 3.0:1 | |
| DC Power Supply | V | | 9 | |
| Supply Current | mA | | 1650 | |
| Size (Excluding SMA Connector) | inch | 3.750" x 2.000" x 1.813" | | |
| Weight | Oz. | 8 | | |

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Typical Performance @ +25 °C



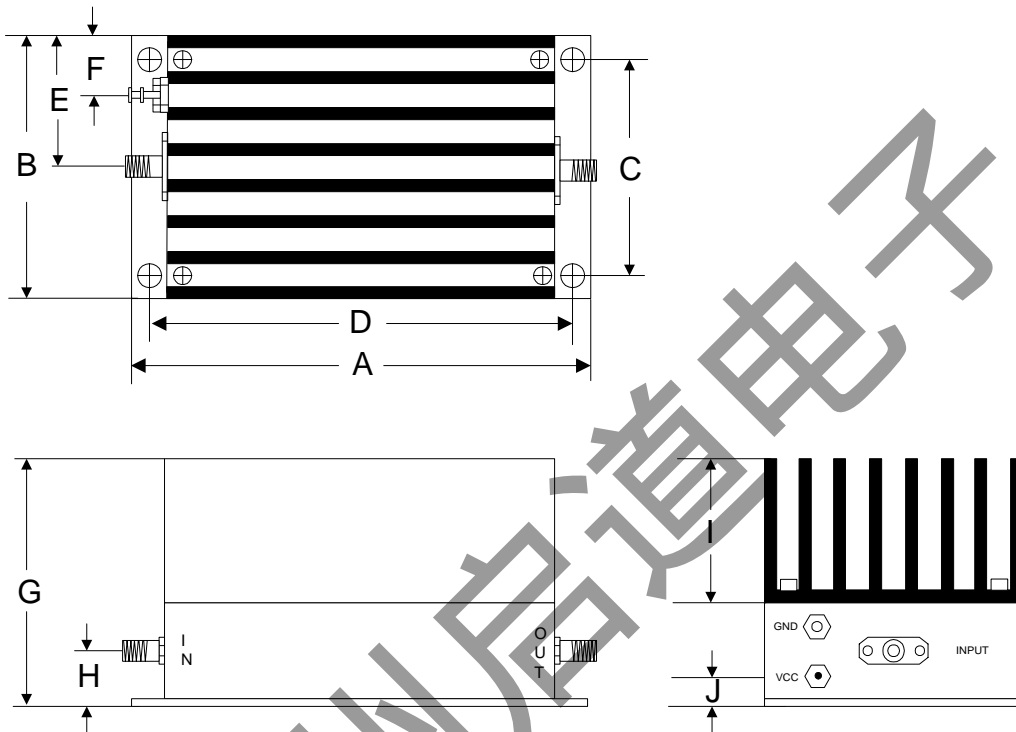
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Absolute Maximum Ratings

| Parameter | Absolute Maximum |
|-----------------------|-------------------|
| RF Input Power | +13dBm |
| Supply Voltage | +15V |
| Operating Temperature | -30 °C to +65 °C |
| Storage Temperature | -55 °C to +100 °C |

Outline



| | A | B | C | D | E | F | G | H | I | J |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Inch | 3.750 | 2.000 | 1.750 | 3.400 | 1.000 | 0.400 | 1.813 | 0.375 | 1.000 | 0.238 |
| mm | 92.25 | 50.80 | 44.45 | 86.36 | 25.40 | 10.16 | 46.05 | 9.53 | 25.40 | 6.03 |