

FEATURES:

- 1 MHz ~ 600 MHz;
- 16.0 dB Gain;
- 3.0 dB Noise Figure;
- 30.0 dBm P_{1dB} ;
- 45.0 dBm IP_3 ;
- RoHS Compliant.

APPLICATIONS:

- Base Station;
- Data Communication;
- Tower Top;
- Last-Mile Wireless Communication;
- Measurement.



LPA00010600A, 1 MHz ~ 600 MHz WIDE BAND POWER AMPLIFIER

ELECTRICAL SPECIFICATIONS @ 21 °C

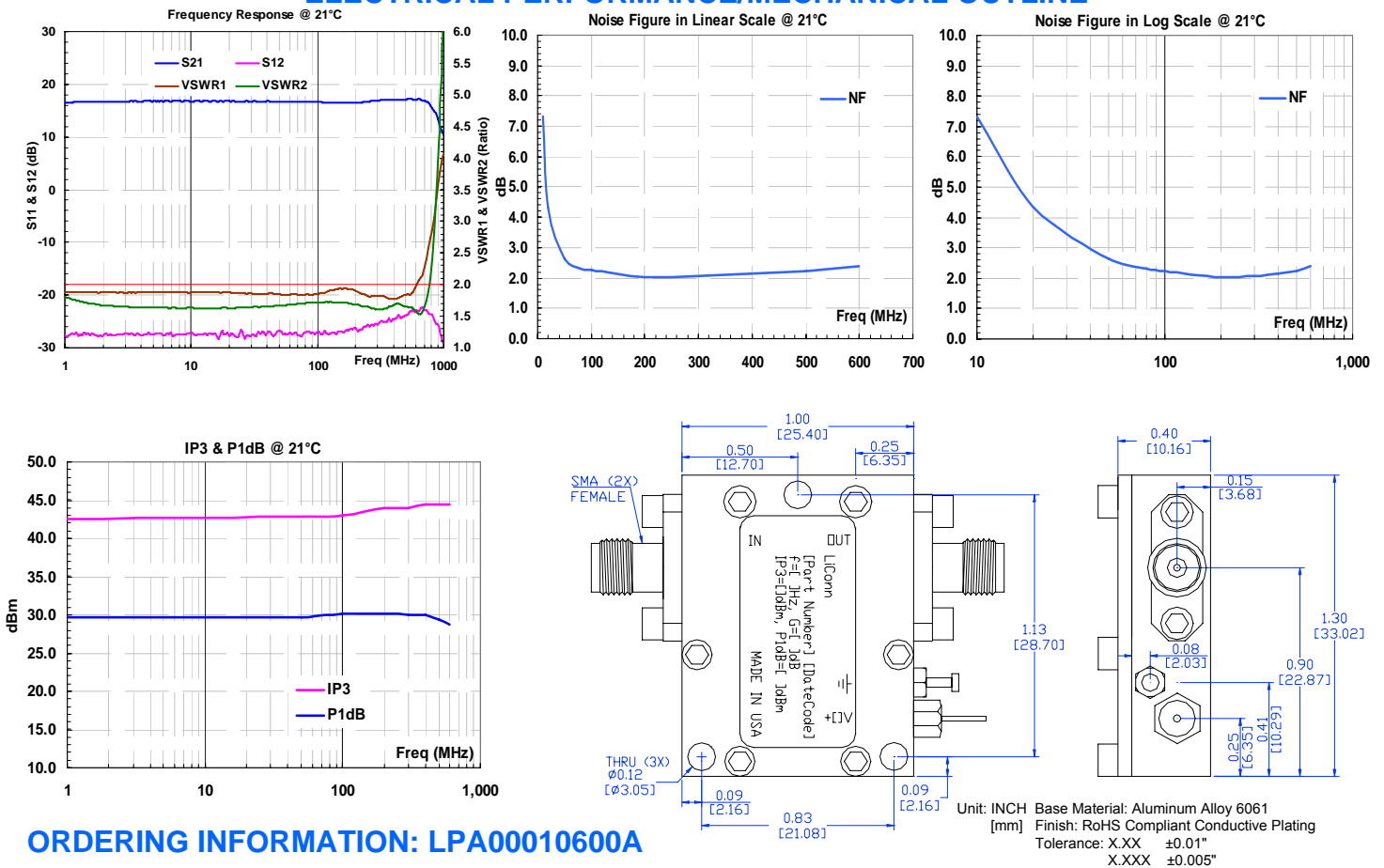
| Symbol | Parameters/Conditions | Unit | Min | Typical | Max |
|------------|--|-------|-------|-----------|-------|
| G | Gain | dB | 15 | 16 | 18 |
| ΔG | Gain Flatness | dB | | ± 0.5 | |
| $VSWR_1$ | Input VSWR | Ratio | | | 2.0:1 |
| $VSWR_2$ | Output VSWR | Ratio | | | 2.0:1 |
| S_{12} | Reverse Isolation | dB | | 27 | |
| NF | Noise Figure | dB | | 3.0 | |
| OIP_3 | Output 3 rd Order Intercept | dBm | 42 | 45 | |
| P_{1dB} | Output 1dB Gain Compression | dBm | 28 | 30 | |
| I_{dd} | Device Current ($V_{dd}=+12V$) | mA | | 200 | |
| V_{dd} | Positive Power Supply Voltage | V | +11.5 | +12 | +15 |
| Z_0 | Impedance | Ohm | | 50 | |

ABSOLUTE MAXIMUM RATINGS¹

| Parameters/Conditions | Unit | Maximum |
|-------------------------|------|------------|
| Channel Temperature | °C | +150 |
| CW RF Input Power | dBm | 20 |
| DC Supply Voltage | V | 16 |
| Drain Current | mA | 250 |
| Thermal Resistance | °C/W | 32 |
| Total Power Dissipation | W | 3.0 |
| Operating Temperature | °C | -40 ~ +85 |
| Storage Temperature | °C | -55 ~ +125 |

[1] Operation beyond these limits may cause permanent damage.

ELECTRICAL PERFORMANCE/MECHANICAL OUTLINE



ORDERING INFORMATION: LPA00010600A