*Coaxial*

# Broadband Medium Power Amplifier Wide Voltage Range MPA5G18GR

## 50Ω (match on input & output) Broadband 5G to 18G Hz

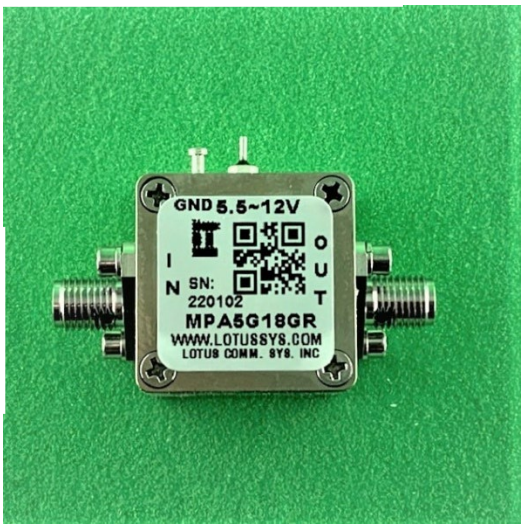
Case PN: 6DD4W6H41SA2O

**Features:**

* **Frequency Range: 5GHz to 18GHz;**
* **Noise Figure: typical 7.0dB @ 10 GHz**
* **Gain: typical 17 dB @ 10 GHz**
* **Output P1dB: 19.5 dBm typ.**
* **Output IP3: 28 dBm typ.**
* **DC Voltage: +5.5~12V**
* **Operating Current: 130mA**
* **Stainless Steel SMA Female Connector**
* **EMI Shield & Waterproof Option Available ($90 Extra)**
* **ROHS Compliant**

**Applications:**

* **Test Instrumentation**
* **Wideband A/D System**
* **General Purpose Wireless**
* **Radar & VSAT**
* **SDR & Ham Radio**




**General Description:**

**MPA5G18GR** is a broadband, median power amplifier with 17 dB typical gain from 5 to 18 GHz in a small 15/16”x15/16”x0.49” shielded RF enclosure. Third order linearity (OIP3) is typically 28 dBm. RF Input/output are DC blocked.

**Electrical Specifications:**

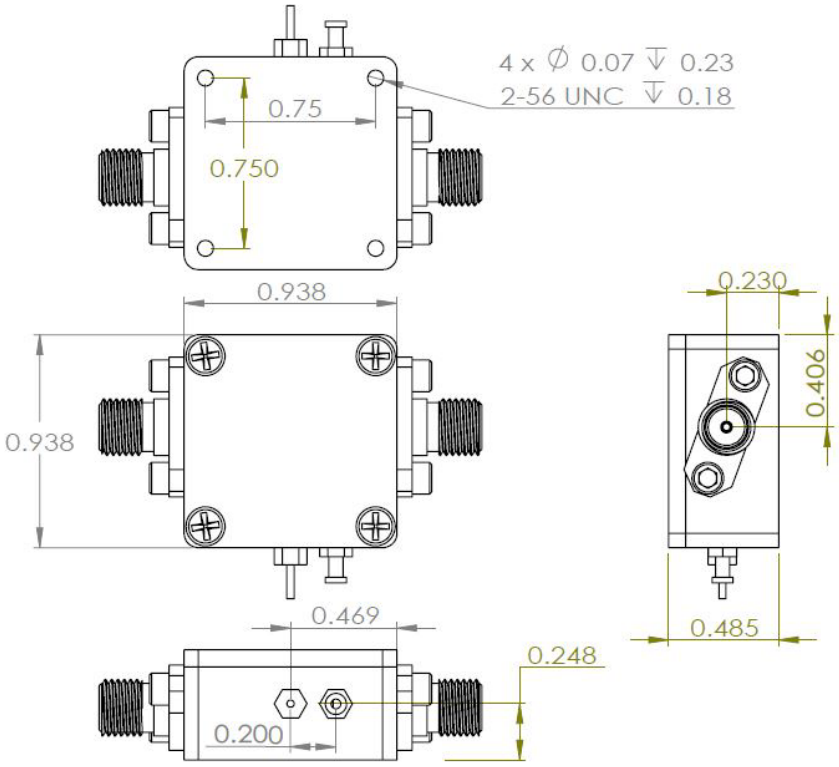
| Item | Parameter | Min | Typ | Max | Min | Typ | Max | Units |
|---|---|---|---|---|---|---|---|---|
| 1 | Operational Freq. | | 5 - 14 | | | 15 - 18 | | GHz |
| 2 | Gain | 15 | 17 | | 12.5 | 15 | | dB |
| 3 | Input Return Loss | | 13 | | | 13 | | dB |
| 4 | Output Return Loss | | 12 | | | 8 | | dB |
| 5 | Noise Figure | | 7 | | | 7 | | dB |
| 6 | Output P1dB | 16.5 | 19.5 | | 16 | 19 | | dBm |
| 7 | Output IP3 | | 28 | | | 25 | | dBm |
| 8 | Current, $I_{DD}$ | | 130 | 150 | | 130 | 150 | mA |

**Test Conditions: $V_{DD}$=+5V, Temp = +25 ºC, 50Ω system.**

**Absolute Maximum Ratings**

| Item | Parameter | Rating | UNITS |
|---|---|---|---|
| 1 | Max Device Voltage | +18 | V |
| 2 | Max RF input Power | +10 | dBm |
| 3 | Operating Temperature | -40 to +85 | ºC |
| 4 | Max Storage Temperature | -65 to +150 | ºC |

**Outline Drawing (inch)**




**S-Parameters**