

|   |                                      |                                    |
|---|--------------------------------------|------------------------------------|
| Wideband RF Power Amplifier<br><b>CRF-PA-2G6G-50W</b> | Frequency Range<br>2,000 - 6,000 MHz | Supply Voltage<br>36 - 46 VDC      |
|   | Output Power<br>50 W                 | Package Size<br>125 × 59 × 21.5 mm |

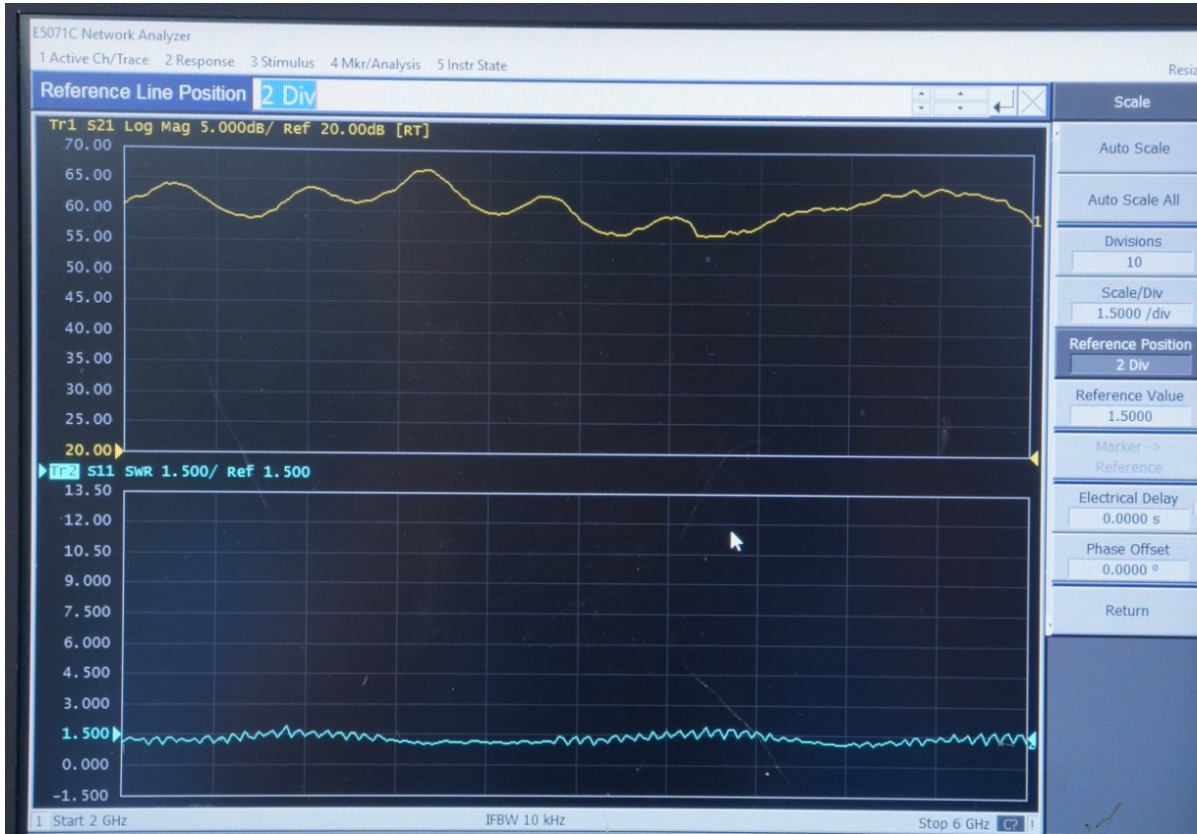
## Electrical Characteristics

Test conditions: T<sub>case</sub> = 25°C, V<sub>supply</sub> per model, 50Ω system, unless otherwise specified.

| Parameter                    | Min | Typ               | Max   | Units |
|------------------------------|-----|-------------------|-------|-------|
| Frequency Range              |     | 2,000 - 6,000 MHz |       |       |
| Output Power                 | 50  | 50                |       | W     |
| Gain                         | 46  | 47                | 48    | dB    |
| Gain Flatness                |     |                   | ≤ 1.8 | dB    |
| Input Drive for Rated Output | -1  |                   | 6     | dBm   |
| Harmonics                    |     | -12               | ≤ -10 | dBc   |
| Spurious                     |     |                   | ≤ -60 | dBc   |
| Input VSWR                   |     | 1.3               | ≤ 1.8 | :1    |
| Output VSWR                  |     | 1.5               | ≤ 2.0 | :1    |
| Supply Voltage               | 40  | 58                |       | VDC   |
| Current Consumption          |     |                   | ≤ 12  | A     |
| Cooling Method               |     | Air Cooling       |       |       |
| Output Power Type            |     | CW / Saturated    |       |       |
| RF Input Connector           |     | SMA-Female        |       |       |
| RF Output Connector          |     | N-Female          |       |       |
| Operating Temperature        | -40 |                   | +85   | °C    |
| Storage Temperature          | -40 |                   | +85   | °C    |
| Dimensions                   |     | 200 × 158 × 25 mm |       |       |
| Weight                       |     |                   | ≤ 1.4 | kg    |

## Typical Performance Curve

Representative swept measurement of gain (S21) and input match / SWR (S11) versus frequency for the corresponding model.



Curve note: Tr1 corresponds to gain (S21, dB). Tr2 corresponds to input match / SWR (S11). Original uploaded instrument screenshot retained.

|  |   |
|--|---|
| <p><b>Applications</b><br/>RF testing / communication / system integration</p> | <p><b>Customization</b><br/>Custom frequency bands, connectors, control interfaces and integration details are available. CorelixRF engineering team can provide feasibility reviews within 48 hours.</p> |
|--|---|

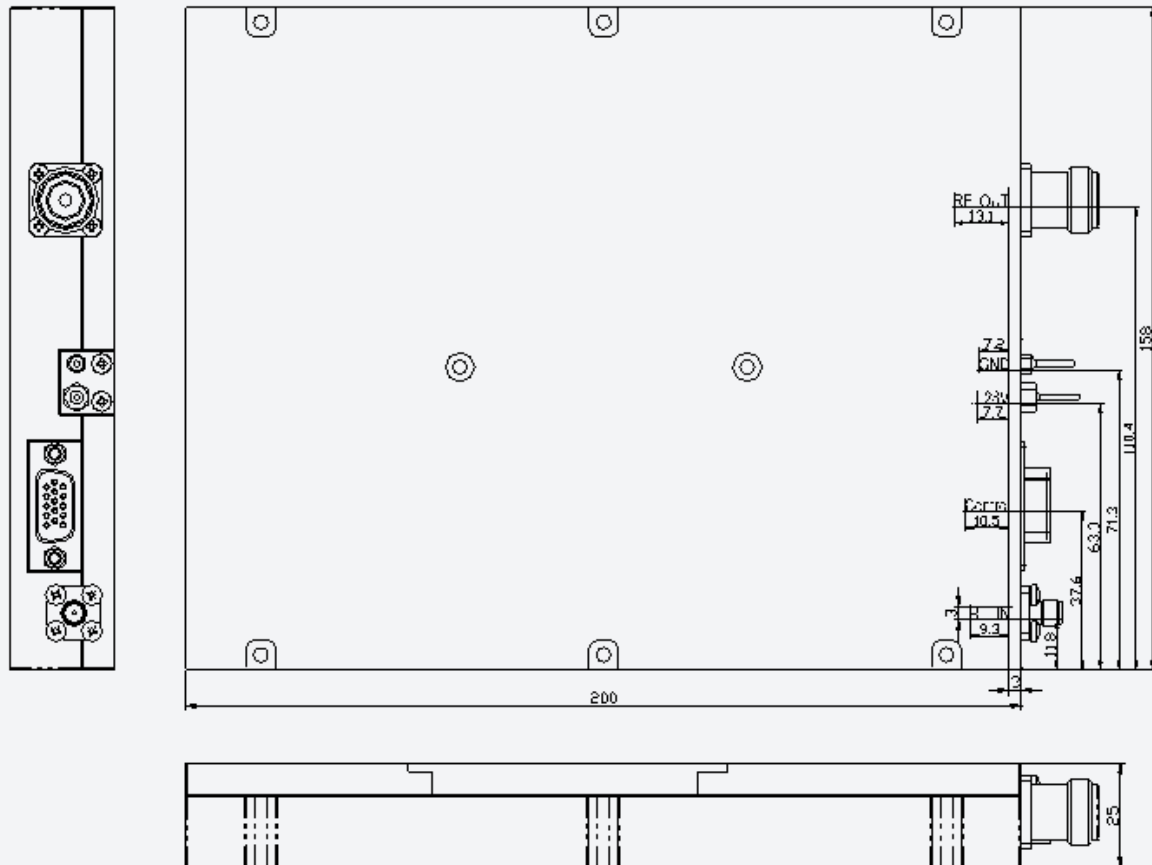
### Compliance / Quality Framework

|                       |                 |                 |                  |
|-----------------------|-----------------|-----------------|------------------|
| <b>RoHS Compliant</b> | <b>CE / FCC</b> | <b>ISO 9001</b> | <b>GJB 9001C</b> |
|-----------------------|-----------------|-----------------|------------------|

MTBF: Reliability data available on request. Environmental and validation data can be supplied for project review where applicable.

# Mechanical Outline

Complete outline drawing shown below for clear integration reference.



|  |   |  |
|--|---|--|
| <p><b>Model</b><br/>CRF-PA-2G6G-50W</p>  | <p><b>Package Size</b><br/>200 x 158 x 25 mm</p>                              | <p><b>Weight</b><br/>≤ 1.4 kg</p>  |
| <p><b>Connector Reference</b><br/>RF IN: SMA-KFD46<br/>RF OUT: N-Female<br/>Control: DB9</p> | <p><b>Power Supply</b><br/>40 - 58 VDC<br/>Current Consumption<br/>≤ 12 A</p> | <p><b>Release Note</b><br/>Mechanical drawing is kept fully visible for easier dimensional review and connector location confirmation.</p> |