PULSED RF POWER AMPLIFIER

R&K-GA2856BW20-5861RP

- All Solid-State Amplifier
- Frequency Range: 2856MHz ± 10MHz
- Output Power: 1200W (min.) @ Peak (Pulse)

SPECIFICATIONS @ +25℃

- Frequency Range: 2856MHz ± 10MHz
- Small Signal Gain: +58.0dB (min.)
- Output Power: 1200W (min.) @ Peak
  - Pulse Width: 5μs Duty: 0.05%
- Pulse Rise Time: 150ns (max.)
- Pulse Fall Time: 150ns (max.)
- Over/Under Shoot: ±3% (max.)
- Pulse Flatness: ±3% (max.) @ Flat-top
- Phase Stability: ±3°
- Level Stability: ±0.25dB
- Harmonics: ≤−50.0dBc (max.) @Po=1200W
- Impedance: 50Ω
- Input VSWR: 1.5 (max.)
- Maximum RF Input Power: +3.0dBm
- AC Supply Input: AC200V ± 10%/φ, 50/60Hz, 800VA
- Operating Temperature: 0℃ to +35℃
- Storage Temperature: −15℃ to +55℃
- Connectors:
  - RF - IN N - FEMALE
  - RF - OUT N - FEMALE
  - P.S. Unit: (W)480mm × (D)449.5mm × (H)177mm
  - N.C.T Unit: (W)480mm × (D)449.5mm × (H)132.6mm
- Weight: 100.0kg (max.)
- Cooling: Forced Air Cooling
- Protection Circuits: Over Temperature Protection, Power Supply Voltage Protection, With Output Circulator

Model Name: R&K-GA2856BW20-5861RP

No Option

R&K reserves the right to make changes in the specifications of or discontinue products at any time without notice. R&K products shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as aerospace uses or medical life support equipment. Further, R&K cannot accept products to any country for use in military or defense applications.

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Output Pulse Characteristics

Frequency: 2856MHz
Po: 1.2kW @Duty0.05%/100pps
Pulse Width: 5usec
Pulse Period: 10msec

- Output Pulse

Rise Time: 25ns (10%-90%), Overshoot: ≤3%

- Pulse Rise

Fall Time: 5ns (90%-10%), Undershoot: ≤3%

- Pulse Fall

Frequency: 2856MHz
Po: 800W @Duty0.05%/100pps
Pulse Width: 5usec
Pulse Period: 10msec

- Output Pulse

Rise Time: 25ns (10%-90%)

- Pulse Rise

Fall Time: 5ns (90%-10%)

- Pulse Fall

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**Phase Stability**

- Measuring Points:
  - 0.5μs
  - 0.9μs
  - 4.5μs

**Gain & Phase Flatness**

- Frequency: 2856MHz
- Po: 1.2kW @ Duty 0.05%/100pps
- Pulse Width: 5usec
- Pulse Period: 10msec

**Phase Stability v.s. Output Power**

- Frequency: 2856MHz
- Po: 500W @ Duty 0.05%/100pps
- Pulse Width: 5usec
- Pulse Period: 10msec

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TYPICAL PERFORMANCE (Temp @+25°C)

Phase Stability

Measuring Points

- 0.5μs
- 0.7μs
- 4.5μs

Elapsed Time: 120 minutes, Internal Temperature: +28°C

Frequency: 2856MHz
Po: 1.2kW @ Duty 0.05%/100pps
Pulse Width: 5usec
Pulse Period: 10msec

Elapsed Time: 10 seconds, Internal Temperature: +22°C

Frequency: 2856MHz
Po: 1.2kW @ Duty 0.05%/100pps
Pulse Width: 5usec
Pulse Period: 10msec

Elapsed Time: 10 minutes, Internal Temperature: +24°C

Frequency: 2856MHz
Po: 1.2kW @ Duty 0.05%/100pps
Pulse Width: 5usec
Pulse Period: 10msec

Elapsed Time: 120 minutes, Internal Temperature: +28°C

Frequency: 2856MHz
Po: 1.2kW @ Duty 0.05%/100pps
Pulse Width: 5usec
Pulse Period: 10msec

Phase Stability v.s. Time

- 0.5μs
- 0.9μs
- 4.5μs
- Internal Temp.

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