R&K-GA2856BW4-5555RPW

PULSED RF POWER AMPLIFIER

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.

**Very High Stability (Both Phase & Level)**
**All Solid-State Amplifier**
**Frequency Range:** 2856MHz ± 2MHz
**Output Power:** 300W (min.) @Peak (Pulse)

**APPLICATION**
- Accelerator Application

**SPECIFICATIONS @ +25°C**
- Frequency Range: 2856MHz ± 2MHz
- Small Signal Gain: +55.0dB (min.)
- Output Power: 300W (min.) @Peak
- Pulse Rise Time: 30ns (max.)
- Pulse Fall Time: 30ns (max.)
- Over/Under Shoot: 3% (max.)
- Pulse Flatness: 1% (max.) @Flat-top
- Impedance: 50Ω
- Output VSWR: 1.5 (max.)
- Input VSWR: 1.2 (max.)
- Maximum RF Input Power: 0dBm
- AC Supply Input: AC100V ± 15%, 50/60Hz, 200VA
- Operating Temperature: -15°C to +55°C
- Storage Temperature: 0°C to +35°C
- Connectors: RF - IN N - FEMALE, RF - OUT N - FEMALE
- Size: (W)480mm × (D)449.5mm × (H)177mm
- Weight: 35.0kg (max.)
- Cooling: Forced Air Cooling and Water Cooling
- Protection Circuits: Over Temperature Protection, Power Supply Voltage Protection, Output Over Power Protection
- Other: With Output Circulator

**TYPICAL PERFORMANCE (Temp @+25°C)**

**Gain Flatness**

**Input / Output VSWR**

**Output Power Linearity & Current**

**Applications**
- **Accelerator Application**

**Model Name**
R&K-GA2856BW4-5555RPW OP XX

**Option:** Ask HOW TO ORDER
### Gain / Phase Stability

- **Phase Stability in Pulse Width**

  - Frequency: 2856MHz
  - Po: 300W @ Duty 0.01%/16.66pps
  - Pulse width: 6 usec
  - Pulse Period: 60 msec

- **Gain Stability (1st Pulse Reference)**

  - Reference: 0.20 usec
  - Attenuation: -127.74 deg

- **Gain Stability (After 60ms, 2nd Pulse)**

  - Reference: 0.20 usec
  - Attenuation: -127.73 deg

- **Phase Stability (1st Pulse Reference)**

  - Reference: 0.20 usec
  - Attenuation: -124.09 deg

- **Phase Stability (After 60ms, 2nd Pulse)**

  - Reference: 0.20 usec
  - Attenuation: -124.07 deg

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**R&K Company Limited**

721-1 Maeda, Fuji-City, Shizuoka Pref, 416-8577 Japan

Tel: +81-543-31-2800  E-mail: info@rkco.jp  Fax: +81-543-31-1600  URL: http://rk-microwave.com

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TYPICAL PERFORMANCE (Temp @+25℃)

Frequency: 2856MHz  
Po: 300W  
Duty: 0.01% / 16.66 pps  
Pulse width: 6usec  
Pulse Period: 60msec  
10min. after turn on

Frequency: 2856MHz  
Po: 300W  
Duty: 0.01% / 16.66 pps  
Pulse width: 6usec  
Pulse Period: 60msec  
60min. after turn on

Frequency: 2856MHz  
Po: 300W  
Duty: 0.01% / 16.66 pps  
Pulse width: 6usec  
Pulse Period: 60msec  
120min. after turn on

Frequency: 2856MHz  
Po: 300W  
Duty: 0.01% / 16.66 pps  
Pulse width: 6usec  
Pulse Period: 60msec  
240min. after turn on
### Output Pulse Characteristics

- **Pulse Rise**
  - Frequency: 2856MHz
  - Po: 300W @ Duty 0.01%/16.66pps
  - Pulse width: 6usec
  - Pulse Period: 60msec
- **Over Shoot**
  - Frequency: 2856MHz
  - Po: 300W @ Duty 0.01%/16.66pps
  - Pulse width: 6usec
  - Pulse Period: 60msec
- **Pulse Fall**
  - Frequency: 2856MHz
  - Po: 300W @ Duty 0.01%/16.66pps
  - Pulse width: 6usec
  - Pulse Period: 60msec
- **Under Shoot**
  - Frequency: 2856MHz
  - Po: 300W @ Duty 0.01%/16.66pps
  - Pulse width: 6usec
  - Pulse Period: 60msec