RF POWER AMPLIFIER

GA402M802-4545R

**APPLICATION**
- All Solid-State Amplifier
- Broadband Frequency: 4000MHz ~ 8000MHz
- Output Power (CW): 25W (min.) @Psat.
- Output Circulator Protected for 100% Power Reflection

**SPECIFICATIONS** @ +25°C
- Frequency Range: 4000MHz ~ 8000MHz
- Small Signal Gain: +45.0dB (min.)
- Gain Flatness: ±3.0dB (max.)
- Output Power (CW): 30W (typ.), 25W (min.) @Psat.
- Harmonics:
  - 4000MHz ~ 4500MHz: -18.0dBc (typ.) @Po=25W
  - 4500MHz ~ 8000MHz: -20.0dBc (max.) @Po=25W
- Spurious: -70.0dBc (max.) @Po=25W
- Impedance: 50Ω
- Input Return Loss: 9.5dB (min.) / VSWR: 2.0 (max.)
- Output Return Loss: 9.5dB (min.) / VSWR: 2.0 (max.)
- Maximum RF Input Power: +5.0dBm
- AC Supply Input: AC90V ~ 240V / 1φ, 50/60Hz, 750VA
- Operating Temperature: 0°C to +40°C
- Storage Temperature: -15°C to +65°C
- Connectors:
  - RF - IN: SMA - FEMALE @FRONT
  - RF - OUT: SMA - FEMALE @FRONT
- Size: (W)430mm x (D)560mm x (H)177mm (EIA: 4U)
  *Excluding Projection
- Weight: 26.5kg (typ.)
- Cooling: Forced Air Cooling
- Protection Circuits:
  - Over Temperature Protection
  - Power Supply Voltage Protection
- Other Function: With Output Circulator

**TYPICAL PERFORMANCE** (Temp @ +25°C)

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Gain (dB)</th>
<th>Gain Flatness</th>
<th>Output Power Linearity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000MHz</td>
<td>55.0</td>
<td>54.5</td>
<td>46.0</td>
</tr>
<tr>
<td>5000MHz</td>
<td>55.5</td>
<td>55.0</td>
<td>46.5</td>
</tr>
<tr>
<td>6000MHz</td>
<td>56.0</td>
<td>55.5</td>
<td>47.0</td>
</tr>
<tr>
<td>7000MHz</td>
<td>56.5</td>
<td>56.0</td>
<td>47.5</td>
</tr>
<tr>
<td>8000MHz</td>
<td>57.0</td>
<td>56.5</td>
<td>48.0</td>
</tr>
</tbody>
</table>

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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, the export of R&K products from Japan may be subject to an export license by the government of Japan, based on Japan’s “Foreign Exchange and Foreign Trade Law”.

**Technical Details**
- EMC (Electromagnetic Compatibility)
- Accelerator Application
- Telecommunication Test and Measurement Application
- Etc...

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TAKENOUCHI Test and Measurement Co., Ltd.
721-1 Maeda, Fuji-City, Shizuoka-Pref. 416-8577 Japan
Tel: +81-545-31-2600 E-mail: info@rkco.jp
Fax: +81-545-31-1800 URL: https://rk-microwave.com

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OUTLINE DRAWING

OUTLINE DRAWING

OUTLINE DRAWING

OUTLINE DRAWING
RF Output Pulse Characteristics

Output Power: 25W, Pulse Width: 100μs, Duty: 10%

- Frequency: 4000MHz
  - Rise Time: 3.2ns
  - Fall Time: 3.8ns

- Frequency: 6000MHz
  - Rise Time: 5.5ns
  - Fall Time: 5.3ns

- Frequency: 8000MHz
  - Rise Time: 2.3ns
  - Fall Time: 2.9ns

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