**FSA080M102-5454R**

- **OPEN/SHORT tolerated 24 h/365 days continuous.**
  - Virtually Unlimited Survival Time!
  - Even at Maximum Output Power!

- **80MHz～1000MHz, 250W (typ.) @3dB Comp.**

**APPLICATION**
- EMC (Electromagnetic Compatibility)
- Accelerator Application
- Telecommunication Test and Measurement Application
- Plasma, etc.

**SPECIFICATIONS @ +25°C**

- **Frequency Range**: 80MHz ~ 1000MHz
- **Small Signal Gain**: +54.0dB (min.)
- **Gain Flatness**: ±3.0dB (max.)
- **Output Power (CW)**:
  - 80MHz ~ 500MHz: 150W (min.) @1dB Comp.
  - 500MHz ~ 1000MHz: 120W (min.) @1dB Comp.
  - 80MHz ~ 1000MHz: 250W (typ.), 200W (min.) @3dB Comp.
- **Operation Mode**: Class A
- **Harmonics**: 2nd -20.0dBc (max.) @Po=150W
- **Spurious**: -70.0dBc (max.) @Po=150W
- **Impedance**: 50Ω
- **Input Return Loss**: ≤10.9dB (min.)
- **Maximum RF Input Power**: ≤3.0dBm
- **AC Supply Input**: AC200V ±15% / 1φ, 50/60Hz, 1.7kVA (max.)
- **Operating Temperature**: 0℃ to +40℃
- **Storage Temperature**: -15℃ to +65℃
- **Connectors**:
  - RF IN: N - FEMALE @REAR PANEL
  - RF OUT: N - FEMALE @REAR PANEL
- **Size**: (W)440mm×(D)700mm×(H)177mm (EIA: 4U)
- **Weight**: 37.0kg (typ.)
- **Cooling**: Forced Air Cooling
- **Protection Circuits**:
  - Over Temperature Protection
  - Power Supply Voltage Protection
  - Input Over Power Protection
  - Output Over Power Protection @275W
  - Output Over Reflected Power Protection @250W
- **Remote Interface**:
  - [Standard] GPIB (IEEE-488)
  - [Optional] Ethernet, RS-232C
- **Other Functions**:
  - R&K FSA Circuits
  - Safety Interlock (EMERGENCY)

**TYPICAL PERFORMANCE (Temp @+25°C)**

- **Small Signal Gain**
  - Frequency (MHz): 80 → 1000
  - Gain (dB): 60 → 80

- **Input Return Loss**
  - Frequency (MHz): 80 → 1000
  - Return Loss (dB): 10 → 0

- **Output Power Linearity**
  - Frequency (MHz): 80MHz ~ 1000MHz
  - Output Power (dBm): 55 → 35

- **Output Harmonics**
  - Frequency (MHz): 80MHz ~ 1000MHz
  - Output Harmonics (dBc): 2nd, 3rd, 4th, 5th

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”.

R&K Company Limited
721-1 Maeda, Fuji-City, Shizuoka Pref. 416-8577 Japan
Tel: +81-545-31-2600 E-mail: info@rkco.jp
Fax: +81-545-31-1600 URL: http://rk-microwave.com

Released: Nov. 2021
【Test condition】
- Frequency: 200MHz
- Measuring the time needed for the output stabilized after turning the OPERATE button on and starting RF input from a signal generator.
(Signal generator OUTPUT: -5.70dBm)