Specifications

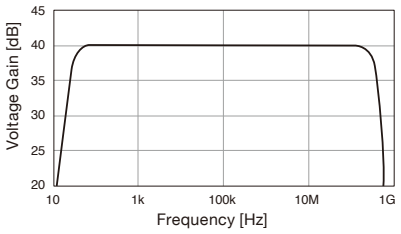
Model	SA-250F6	SA-251F6
Input Type	AC Coupling, unbalanced single-ended input	
Input Impedance	50 Ω (1 MHz)	
Signal Input Voltage Range	0.02 Vp-p or less	
Input VSWR	1.2 or less (100 MHz) 2.0 (250 MHz)	1.2 or less (100 MHz) 1.6 (250 MHz)
Equivalent Input Noise Voltage Density	0.25 nV/√Hz (1 MHz, input open)	
Noise Figure	0.6 dB (10 MHz) 1.0 dB (250 MHz)	0.9 dB (10 MHz) 1.2 dB (250 MHz) 1.8 dB (500 MHz)
Output Form	AC Coupling, unbalanced single-ended output	
Maximum Output Voltage	2.0 Vp-p	
Output Impedance	50 Ω (1 MHz)	
Output VSWR	1.2 or less (100 MHz) 1.4 (250 MHz)	
Input&Output Phase	Inverting	
Voltage Gain	40 ± 0.5 dB (1 MHz)	
Voltage Gain Stability	Temperature 0.001 dB/°C (0 to 40 °C, 1 MHz) Power Voltage 0.005 dB/V (+14 to +16 V, 1 MHz)	
Voltage Gain Frequency Response	100 Hz to 250 MHz (1 MHz Standard)	1 kHz to 500 MHz (1 MHz Standard)

Model	SA-250F6	SA-251F6
Power Supply Connector	Hirose Electric HR10-7R-4P (73)	
Operating Power Supply Voltage Range	Within +15 ±1 V	
Current Consumption	+50 mA (No Signal) +65 mA or less	+65 mA (No Signal) +85 mA or less
Input/Output Connector	SMA connector	
Input/Output Connector	0 °C to 40° C 5 %RH to 85 %RH (No Condensation)	
Storage Temperature &Humidity Range	–10 °C to 50 °C 5 % RH to 95 % RH (No Condensation)	
Pollution Degree	2	
Altitude	2000 m or less	
External Dimensions (Without protrusions)	76 × 50 × 25 mm (Bottom Plate Excluded) 95 × 50 × 29 mm (Bottom Plate Included)	
Weight	Approx. 120 g (Bottom Plate Excluded) Approx. 140 g (Bottom Plate Included)	
RoHS	Directive 2011/65/EU	
EMC	EN61326-1 EN61326-2-1	

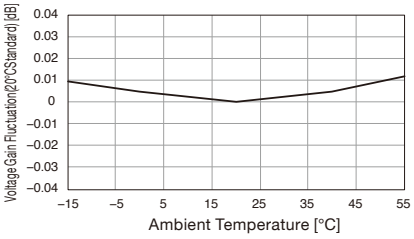
Characteristics Figures

SA-250F6

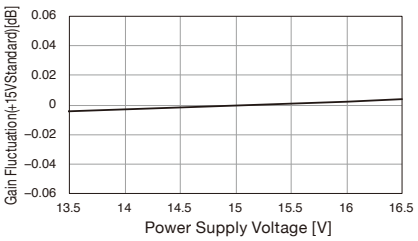
Voltage Gain Frequency Response



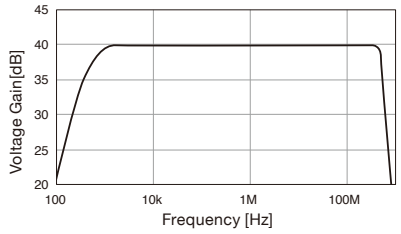
Temperature Dependence of Voltage Gain

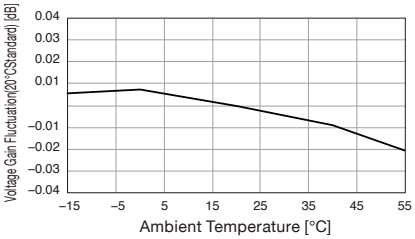


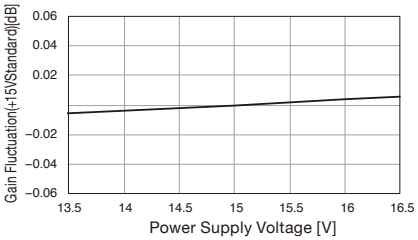
Power Supply Voltage Dependence of Voltage Gain



SA-251F6







SA Series Line-up

	Input Form	Gain	Input Impedance	Frequency Range
SA-200F3	Single-ended	40 dB	1 k / 10 k / 100 kΩ	DC to 800 kHz
SA-220F5	Single-ended FET	46 dB	1 MΩ	1 k to 80 MHz
SA-240F5	Single-ended FET	40 dB	1 M / 100 MΩ /Open	DC to 20 MHz
SA-230F5	Single-ended	46 dB	50 Ω	1 k to 100 MHz
SA-250F6	Single-ended	40 dB	50 Ω	100 to 250 MHz
SA-251F6	Single-ended	40 dB	50 Ω	1 k to 500 MHz
SA-410F3	Differential	40 dB	1 k / 10k / 100 kΩ	DC to 1 MHz
SA-420F5	Differential FET	46 dB	1 MΩ	1 k to 70 MHz
SA-421F5	Differential FET	46 dB	1 MΩ	30 to 30 MHz
SA-440F5	Differential FET	40 dB	1 M / 100 MΩ /Open	DC to 20 MHz
SA-430F5	Differential	46 dB	50 Ω	1 k to 100 MHz

Low Noise DC Power Supplies for the Best Performance of SA Series

LP5394

- Low Noise : 10 μVrms or less typ.
- High Stability : ±10 ppm/°C typ.
- Output Voltage : 0 to ±15 V

LP5393

- Low Noise : 10 μVrms or less typ.
- High Stability : ±20 ppm/°C typ.
- Output Voltage : ±12 V to ±15 V

*Note: The contents of this catalog are current as of May 12, 2021.
Product appearance and specifications are subject to change without notice.
Before purchase, contact us to confirm the latest specifications, price and delivery date.