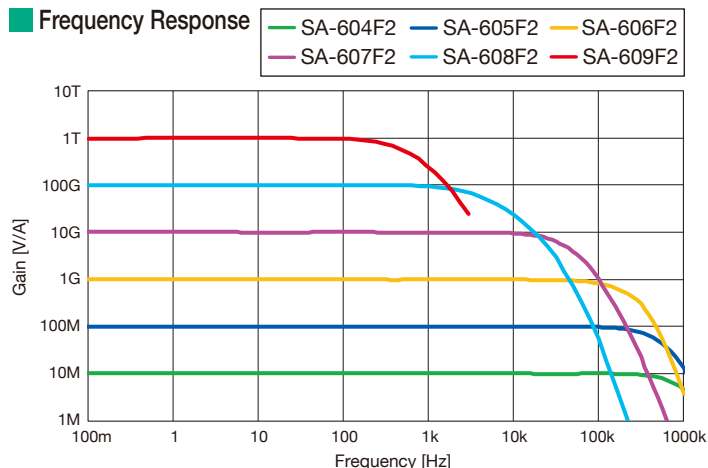


Specifications

Specifications		SA-604F2	SA-605F2	SA-606F2	SA-607F2	SA-608F2	SA-609F2	
INPUT SECTION	Input type	DC coupling, unbalanced single-ended input, SMA connector						
	Maximum input current *1	±1 μA	±100 nA	±10 nA	±1 nA	±100 pA	±10 pA	
	Input impedance *1	1 kΩ (typ.)	3 kΩ (typ.)	10 kΩ (typ.)	30 kΩ (typ.)	100 kΩ (typ.)	600 kΩ (typ.)	
	Recommended signal source resistance	1 MΩ or more	10 MΩ or more	100 MΩ or more	1 GΩ or more	10 GΩ or more	100 GΩ or more	
	Input bias current *2	1 pA (typ.)					0.1 pA (typ.)	10 fA (typ.)
	Equivalent Input Noise Current Density *3	45 fA/√Hz (typ.)	15 fA/√Hz (typ.)	6 fA/√Hz (typ.)	2.5 fA/√Hz (typ.)	0.6 fA/√Hz (typ.)	0.4 fA/√Hz (typ.)	
OUTPUT SECTION	Output type	DC coupling, unbalanced single-ended input, SMA connector						
	Maximum output voltage *1	±10 V						
	Maximum output current *1	±5 mA						
	Output impedance *1	50 Ω ±10%						
	Output offset voltage *4	±3 mV			±5 mV		±15 mV	±30 mV
	Output offset voltage *5 adjustment range	±15 mV (typ.)			±20 mV (typ.)		±50 mV (typ.)	
AMPLIFIER SECTION	Gain *6	1×10 ⁷ (10 M) V/A ±1%	1×10 ⁸ (100 M) V/A ±1%	1×10 ⁹ (1 G) V/A ±1%	1×10 ¹⁰ (10 G) V/A ±1%	1×10 ¹¹ (100 G) V/A ±3%	1×10 ¹² (1 T) ±3%	
	Output gain flatness (within ±0.5 dB) *7*8	DC to 50 kHz	DC to 25 kHz	DC to 10 kHz	DC to 2 kHz	DC to 200 Hz	DC to 30Hz	
	Frequency response(Cs=10 pF) *7*8*9	DC to 500 kHz	DC to 250 kHz	DC to 100 kHz	DC to 20 kHz	DC to 2 kHz	DC to 300Hz	
	Polarity	Non-inverting						
	Low pass filter output (Cut-off frequency setting)	30 kHz / 100 kHz / 300 kHz / THRU switchable by the selector	10 kHz / 30 kHz / 100 kHz / THRU switchable by the selector	3 kHz / 10 kHz / 30 kHz / THRU switchable by the selector	1 kHz / 3 kHz / 10 kHz / THRU switchable by the selector	100 Hz / 300 Hz / 1 kHz / THRU switchable by the selector	30Hz / 3Hz / 0.3Hz / THRU switchable by the selector	
	Power supply connector	HR10-7R-4P (73) connector (Hirose Electric)						
	Operating power supply voltage range	±15 V ±1 V						
	GENERAL	Current consumption (no signal)	±40 mA or less, ±37 mA (typ.)			±40 mA or less, ±32 mA (typ.)		±40 mA or less, ±35 mA (typ.)
Performance guarantee temperature range		23°C ±5°C						
Temperature and humidity range		Operation : 0°C to 40°C, 5 % RH to 85 % RH (non-condensation) Storage : -10°C to 50°C, 5 % RH to 95 % RH (non-condensation)					Operation:0°C to 40°C 5 % to 85 % RH (non-condensation) Storage:-10°C to 50°C 5 % to 75 % RH (non-condensation)	
External Dimensions		76(W)×50(D)×21.1(H) mm (without protrusions and bottom plate)					100(W)×50(D)×25(H)mm	
Weight		Approx. 135 g (without bottom plate)					Approx. 140g (Bottom plate excluded)	
RoHS		Directive 2011/65/EU						
EMC		EN 61326-1, EN61326-2-1						
Accessory		Instruction manual, bottom plate, SMA open plug, BNC to SMA adapter x2						

*1 f = 1 kHz, SA-607F2 and SA-608F2 measured at f = 100 Hz, SA-609F2 measured at f = 10 Hz *2 The input bias current approximately doubles as the temperature increases by +7 °C *3 f = 1 kHz, SA-607F2 measured at f = 100 Hz, SA-608F2 and SA-609F2 measured at f = 10 Hz (When input is open, Measured with a Keysight 89410A equivalent) *4 Input is opened. *5 Adjusted by the variable resistor on front panel *6 Measured with DC *7 When the cut-off frequency is set at THRU. *8 Reference frequency: f = 10 Hz, f = 1 Hz for SA-607F2, f = 10mHz for SA-608F2 *9 "Cs" is an added input capacitance between input and GND.

Frequency Response



We customize amplifiers according to the application and incorporate them into equipment.

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 to ±15 V



Package for PCB mounting



Gain (V/A) : 1 M / 10 M / 100 M / 1 G / 10 G

*Note: The contents of this catalog are current as of February 15, 2024.
Product appearance and specifications are subject to change without notice.
Before purchase, contact us to confirm the latest specifications, price and delivery date.

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