

TRANSIMPEDANCE AMPLIFIER

IV-202F4/IV-204F3

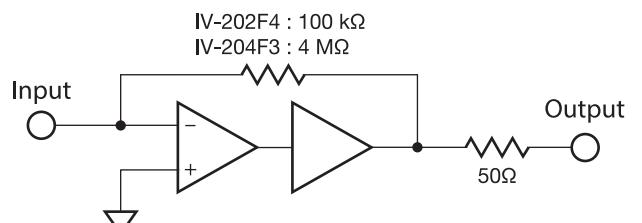


The IV-200 series is a compact current to voltage converter. These enable high precision measurements of low level current, and have adjuster counterbalancing input added capacitance to operate suitably.

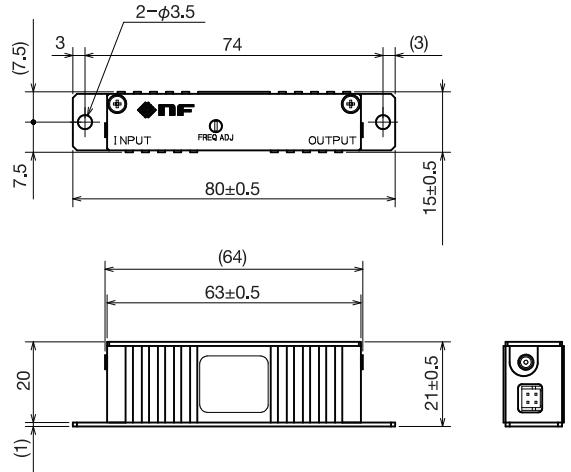
The 6-surface shielded package is a great contributer to the implementation of high precision signal processing.

	IV-202F4	IV-204F3
Absolute maximum ratings		
Supply voltage ($\pm V_s$)	± 18 V	
Signal Input Current	± 20 mA	
Input		
Input type	DC coupling unbalanced, single-ended input (SMB, Male)	
Input impedance	$\leq 30 \Omega$ @DC	$\leq 1.2k \Omega$ @DC
Input bias current	5 pA typ.	
Maximum input current	$\pm 100 \mu A$	$\pm 2.5 \mu A$
Equivalent input noise current density	$\leq 600 fA/\sqrt{Hz}$ 450 fA/ \sqrt{Hz} typ. $f=10$ kHz, Input opened	$\leq 90 fA/\sqrt{Hz}$ 70 fA/ \sqrt{Hz} typ. $f=1$ kHz, Input opened
Equivalent input noise current	$\leq 20 nArms$ typ. 3 Hz to 20 MHz, Input opened	$\leq 1.1 nArms$ typ. 3 Hz to 20 MHz, Input opened
Recommended signal source resistance	$\geq 25 k\Omega$, $\leq 20 pF$	$\geq 1 M\Omega$, $\leq 50 pF$
Output		
Output type	DC coupling unbalanced, single-ended output (SMB, Male)	
Polarity	inverting	
Output impedance	$50 \Omega \pm 10 \%$	
Maximum output voltage	± 10 V	
Maximum output current	± 5 mA	
Output offset voltage	$\leq \pm 10$ mV, Input open	
Amplifier		
Gain(V/A)	1×10^5 V/A $\pm 5 \%$	4×10^6 V/A $\pm 5 \%$
Frequency characteristic	DC to 10 MHz Reference frequency 10kHz +1 to -3 dB	DC to 1 MHz Reference frequency 10kHz +1 to -3 dB
Power Supply		
Operating voltage range	± 15 V ± 1 V	
Quiescent current	± 40 mA (max), ± 25 mA (typ.) With no signal, $V_s=\pm 15$ V	
Connector	DF11-4DP-2DS(52)(4 pins, Male) (HIROSE ELECTRIC)	
General		
RoHS	Directive 2011/65/EU	
Adjuster counterbalancing input added capacitance	Adjust frequency characteristic when the characteristic has "peak" with high capacitance adding input.	
Specified temperature	$23^\circ C \pm 5^\circ C$	
Operating environment	0 to $40^\circ C$, 10 % RH to 90 % RH	
Storage environment	-10 $^\circ C$ to 60 $^\circ C$, 10 % RH to 80 % RH	
Dimensions(mm)	80x15x21 (not including protrusions)	
Weight	Approx. 25 g	
Accessories	Instruction manual, DC power cable	

Block Diagram

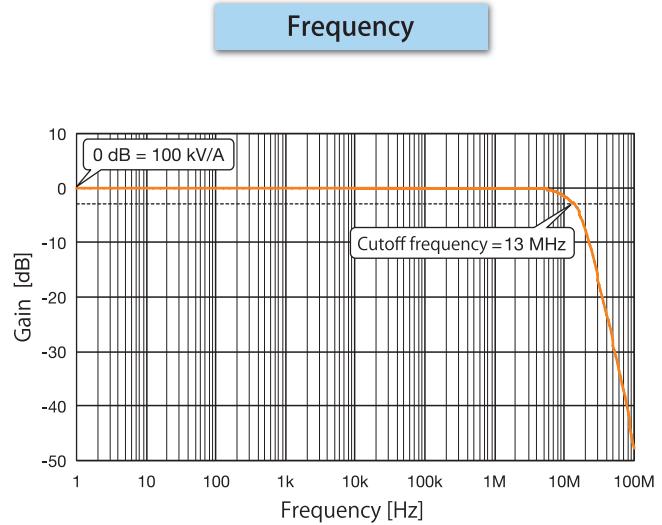
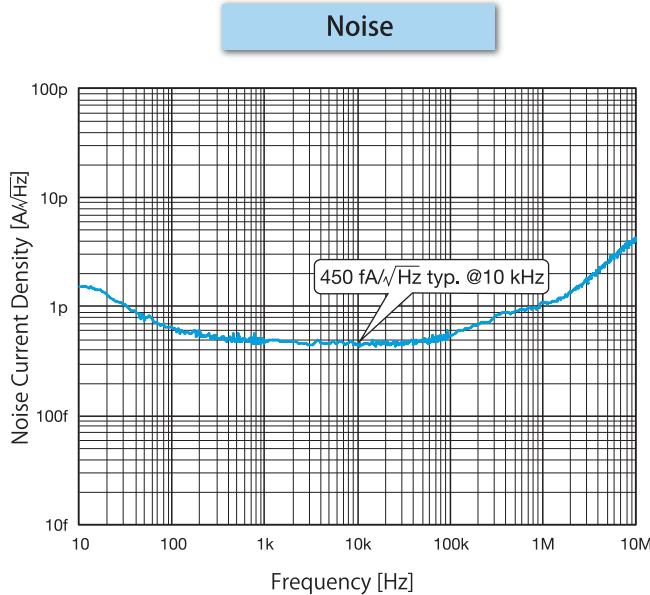


Dimensions



Characteristics

■ IV-202F4



■ IV-204F3

