NF123-201A1 Series
Do-It-Yourself Circuit Build Card

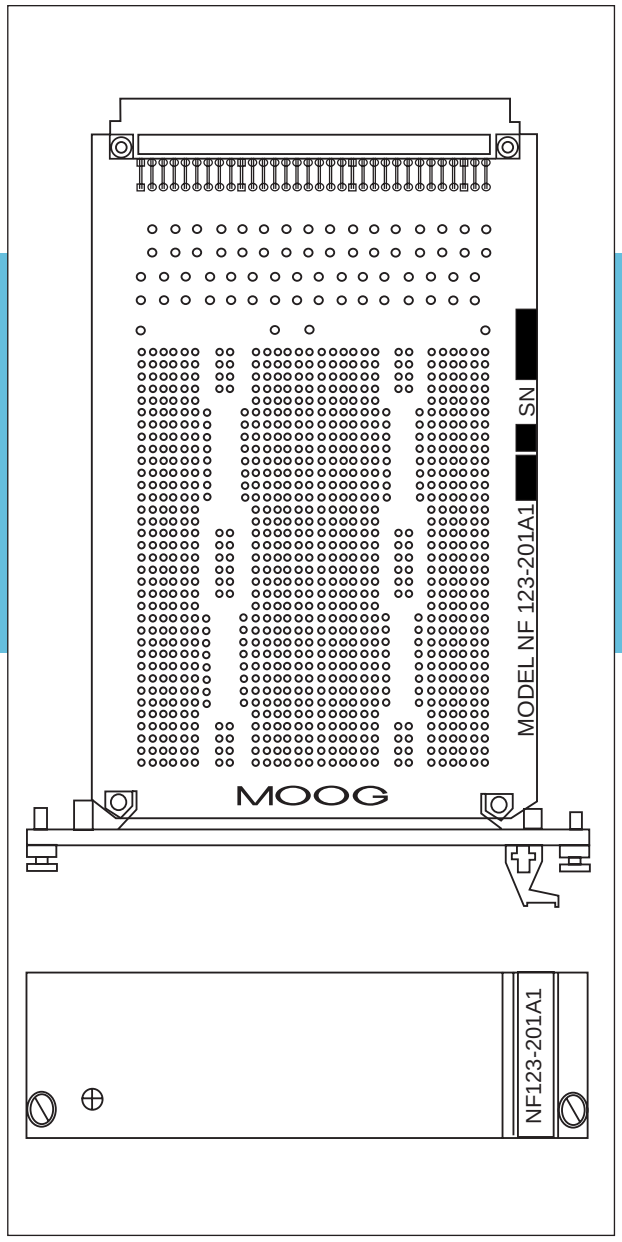
SPECIFICATIONS

Temperature Range:
10°C to 50°C (50°F to120°F)

Connector:
DIN 41612 style C

Form Factor:
Eurocard 100 x 160 mm, 7 HP, 3 U

Weight:
0.38 lb (0.17 kg)



The NF123-201A1 Do-It-Yourself Circuit Build Card is designed to easily accommodate the special custom needs of unique control systems. Card provides flexibility to build custom designed circuits using 'blank' PCB which will accept multiple thru-hole components for various application circuits. Unit provides a 'blank' front panel to set-up desired interfacing test points or adjustment potentiometers for desired options. Typical applications include buffers, oscillators, differential amplifiers, comparators, compensators, integrator, ramp generators, I-V converters & dither generator.

Application configurations are similar to NF123-158 Auxiliary Relay Card, but without limitation to certain pre-assembled circuit configurations.

FEATURES

- Flexible circuit configuration options.
- 'Blank' front-panel for custom interfacing test points & adjustment potentiometers.
- PCB Hole matrix array to accept discrete components or IC's.
- Thru-Hole component mounting capability.
- Connector to PCB Thru-Hole interface capability with labeled connection points.
- DC power supply connections / labeled points for ease of power distribution.
- Up to 4-Channel circuit configuration capability.
- Design 'as-you-go' capability for custom builds.
- Compatible with standard Eurocard Rack Assembly.
- Example circuit configurations are included in this sales brochure.

ADJUSTMENTS

No user adjustments are provided on this card.

NF123-201A1 DO-IT-YOURSELF CIRCUIT BUILD CARD

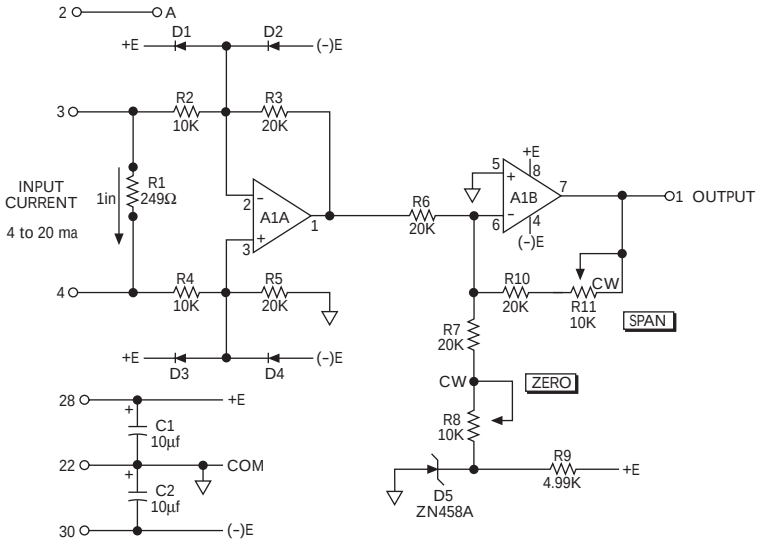
EXAMPLE APPLICATION

Circuitry

The input current is applied from terminal 3 to terminal 4. Since R1 is much less than either R2 or R4, the voltage drop across R1 is approximately R1 times the input current. This voltage drop is differentially amplified by A1A to obtain a voltage which is approximately proportional to the input current. A1B is an inverting amplifier with zero and span adjustments to produce an output voltage at terminal 1 of 0.0 to +10.0 VDC.

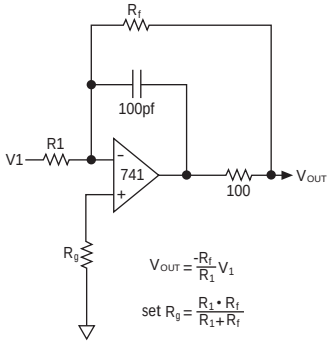
The polarity of input current must be observed (i.e. potential at terminal 3 is greater than terminal 4) or the zero adjustment will not be capable of zeroing the output at terminal 1.

Current to Voltage Converter Schematic

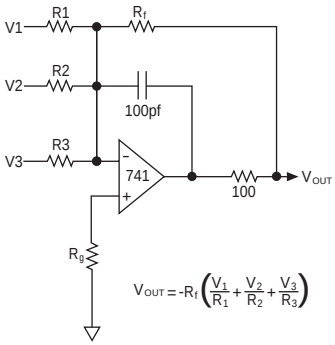


OTHER TYPICAL APPLICATIONS:

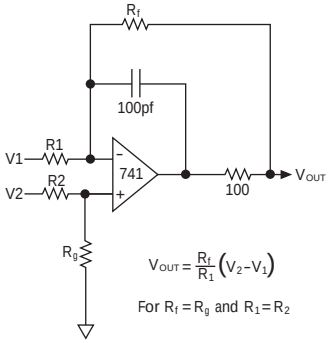
Buffer Amplifier - Inverting



Inverting Summing Amplifier



Differential Amplifier



NOTES:

1. NF = NOT FURNISHED
2. ■ = PIN 1 (SQUARE PAD ON PCB)
3. CW = CLOCKWISE

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