

ISOLATION AMPLIFIER

(high-precision, space and cost saving, DIP type)

MODEL **20VS9-122D**

BEFORE USE

Thank you for choosing us. Before use, please check contents of the package you received as outlined below.

If you have any problems or questions with the product, please contact our sales office or representatives.

■ PACKAGE INCLUDES:

Amplifier.....(1)

■ MODEL NO.

Confirm Model No. marking on the product is exactly what you ordered.

■ INSTRUCTION MANUAL

This manual describes necessary points of caution when you use this product, including installation, connection and basic maintenance procedures.

POINTS OF CAUTION

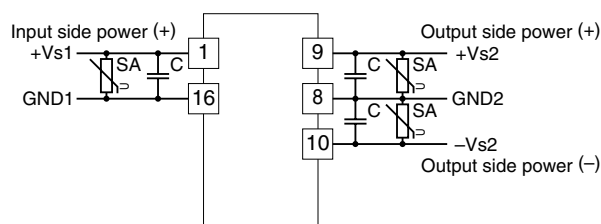
■ POWER INPUT RATING & OPERATIONAL RANGE

• Power Supply

Operational voltage range, power consumption:

Rated voltage $\pm 15V$ DC, approx. 7.5mA DC (no load)

Attach the surge absorber when excessive voltage is applying to the input side power line +15V, output side power line +15V, and -15V.



■ ENVIRONMENT

- Indoor use.
- Do not install the unit where it is subjected to continuous vibration. Do not subject the unit to physical impact.
- Environmental temperature must be within -25 to $+85^{\circ}C$ (-13 to $+185^{\circ}F$) with relative humidity within 30 to 90% RH in order to ensure adequate life span and operation.

■ WIRING

- Do not install cables close to noise sources (relay drive cable, high frequency line, etc.).
- Do not bind these cables together with those in which noises are present. Do not install them in the same duct.

■ MOUNTING THE MODULE

- It is recommended to mount the module on a printed wiring board having through-holes of $\phi 0.8$ with land diameters of $\phi 1.2$.

■ AND

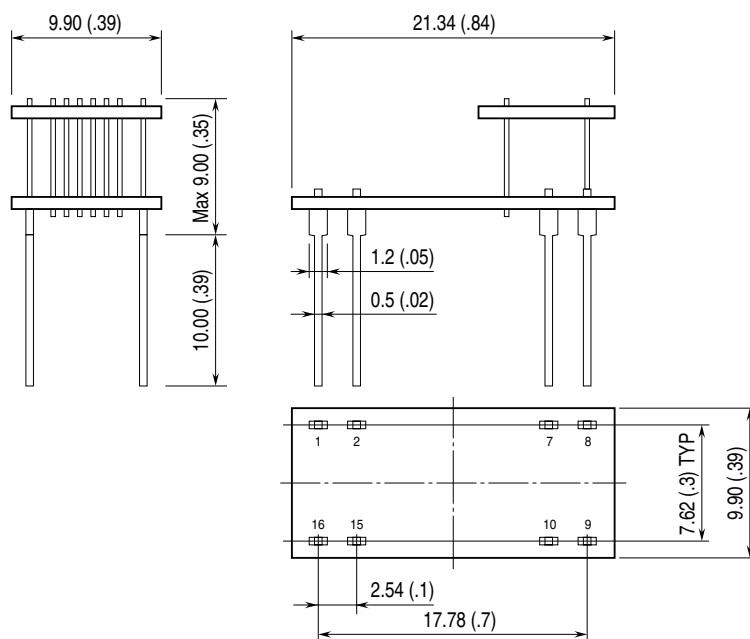
- The unit is designed to function as soon as power is supplied, however, a warm up for 10 minutes is required for satisfying complete performance described in the data sheet.
- With voltage output, do not leave the output terminals shortcircuited for a long time. The unit is designed to endure it without breakdown, however, it may shorten appropriate life duration.

CHECKING

- 1) Terminal wiring: Check that wiring is correctly connected according to the connection diagram.
- 2) Power input voltage: Check voltage across the pins.
- 3) Input: Check that the input signal is within 0 – 100% of the full-scale.
- 4) Output: Check that the load resistance meets the described specifications.

TERMINAL CONNECTIONS

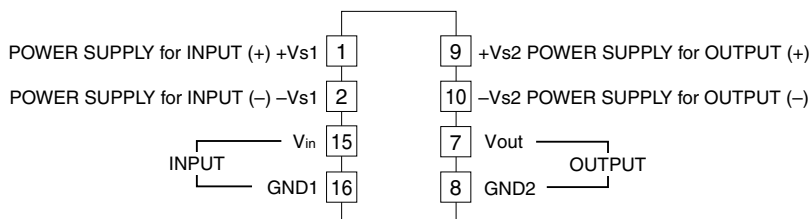
EXTERNAL DIMENSIONS unit: mm (inch)



PIN ASSIGNMENT

1	Power supply for input (+) +Vs1
2	Power supply for input (-) -Vs1
15	Input (+) Vin
16	GND1
7	Output (+) Vout
8	GND2
9	Power supply for output (+) +Vs2
10	Power supply for output (-) -Vs2

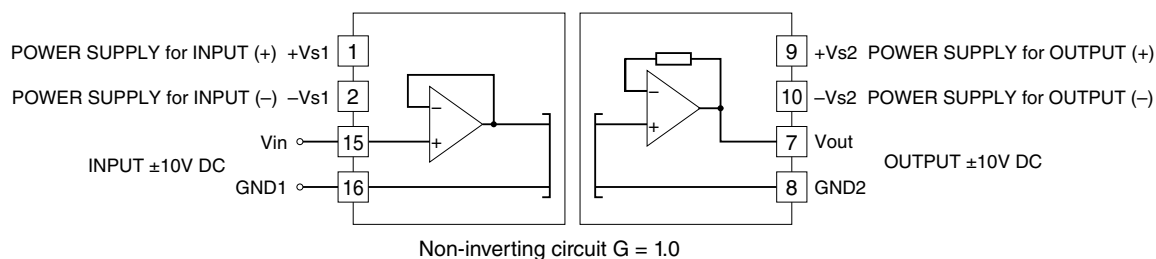
CONNECTION DIAGRAM



APPLICATION EXAMPLES

This unit incorporates a high-precision primary amplifier.

Non-inverting amplifier circuit: Exemplary basic circuit $G = 1$



MAINTENANCE

Regular calibration procedure is explained below:

CALIBRATION

Warm up the unit for at least 10 minutes. Apply 0%, 25%, 50%, 75% and 100% input signals. Check that the output signals for the respective input signals remain within accuracy described in the data sheet.