## Hybrid IC Isolation Amplifiers 20 Series

## ISOLATION AMPLIFIER

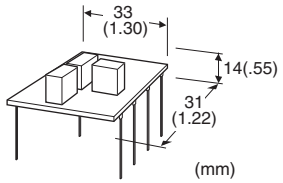
(3-port isolation)

**Functions & Features**

- Being used for printed wiring board installation
- Isolating between input, output and power input
- Dielectric srength 2000 V AC between input, output and power input
- Power 15 V DC

**Typical Applications**

- Isolating the field and input or output circuit of microprocessor to reduce noise from field
- Available for manufacturers of small-lot products to omit the development of isolation circuit




## MODEL: 20VS7-1104-U

## ORDERING INFORMATION

- Code number: 20VS7-1104-U

INPUT RANGE -10 – +10 V DC
OUTPUT RANGE -10 – +10 V DC

## POWER INPUT

**DC Power**

**U**: 15 V DC

## GENERAL SPECIFICATIONS

**Construction**: Hybrid IC
**PWB coating**: Silicone
**Isolation**: Input to output to power

## INPUT SPECIFICATIONS

■ **DC Voltage**
**Input** : -10 – +10 V DC
**Input resistance**: ≥ 1 MΩ (10 kΩ in power failure)
**Overload input voltage**: 30 V DC continuous
**Input offset voltage**: ±30 mV

## OUTPUT SPECIFICATIONS

■ **DC Voltage**: -10 – +10 V DC
**Load resistance**: ≥ 5 kΩ
**Output impedance**: ≤ 1 Ω

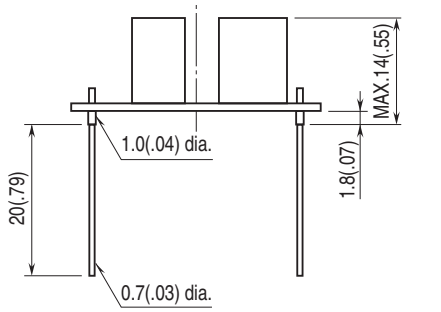
## INSTALLATION

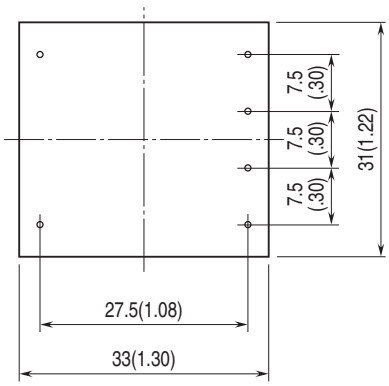
**Power input**
•**DC**: Operational voltage range: Rating ±5 %; approx. 15 mA with no load; ripple 2 %p-p max.
**Operating temperature**: -20 to +70°C (-4 to +158°F)
**Operating humidity**: 30 to 90 %RH (non-condensing)
**Mounting**: Soldering to the printed wiring board
**Weight**: 10 g (0.35 oz)

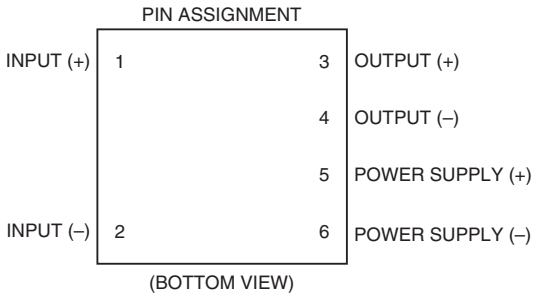
## PERFORMANCE in percentage of span

**Linearity**: ±0.05 %
**Temp. coefficient**: ±80 ppm/°C TYP.
**Frequency characteristics**: Approx. 5 kHz, -3 dB
**Response time**: ≤ 80 µsec. (0 – 90 %)
**Conversion gain**: ×1 ±1 %
**Line voltage effect**: ±0.05 % over voltage range
**Insulation resistance**: ≥ 100 MΩ with 500 V DC
**Dielectric strength**: 2000 V AC @ 1 minute
(input to output to power)
**CMRR**: ≥ 100 dB (500 V AC 50/60 Hz)

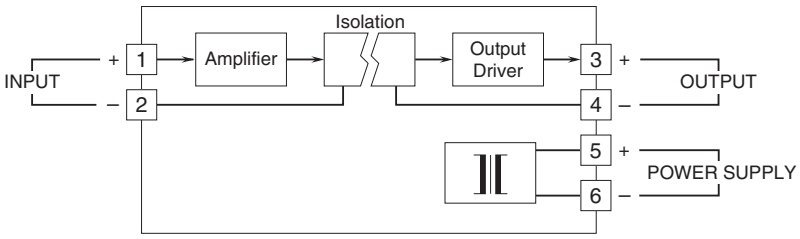
## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm




## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM




⚠ Specifications are subject to change without notice.