

AD5272BRMZ-50

Data Sheet

Non Volatile Digital Potentiometer, 50 kohm, Single, I2C, Serial, ± 1%, 2.7 V

Manufacturers Analog Devices, Inc

Package/Case MSOP10

Product Type D/A Converters (DAC); Digital Potentiometers (DigiPOT)

RoHS Rohs

Lifecycle Images are for reference only

Please submit RFQ for AD5272BRMZ-50 or Final to us; sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The AD5272/AD5274 are single-channel, 1024-/256-position digital rheostats that combine industry leading variable resistor performance with nonvolatile memory (NVM) in a compact package.

The AD5272/AD5274 ensure less than 1% end-to-end resistor tolerance error and offer 50-times programmable (50-TP) memory.

The guaranteed industry leading low resistor tolerance error feature simplifies open-loop applications as well as precision calibration and tolerance matching applications.

The AD5272/AD5274 device wiper settings are controllable through the I2C-compatible digital interface. Unlimited adjustments are allowed before programming the resistance value into the 50-TP memory. The AD5272/AD5274 do not require any external voltage supply to facilitate fuse blow and there are 50 opportunities for permanent programming. During 50-TP activation, a permanent blow fuse command freezes the wiper position (analogous to placing epoxy on a mechanical trimmer).

The AD5272/AD5274 are available in a 3 mm \times 3 mm 10-lead LFCSP package and in a 10-lead MSOP package. The parts are guaranteed to operate over the extended industrial temperature range of -40° C to $+125^{\circ}$ C.

Features

Single-channel, 1024-/256-position resolution

 $20 \text{ k}\Omega$, $50 \text{ k}\Omega$, $100 \text{ k}\Omega$ nominal resistance

Maximum $\pm 1\%$ nominal resistor tolerance error

50-times programmable (50-TP) wiper memory

Rheostat mode temperature coefficient: 5 ppm/°C

2.7 V to 5.5 V single-supply operation

I2C-compatible interface

Wiper setting readback

Power on refreshed from 50-TP memory

Thin LFCSP 10-lead, 3 mm × 3 mm × 0.8 mm package

Compact MSOP, 10-lead 3 mm × 4.9 mm × 1.1 mm package

Application

Mechanical rheostat replacements

Op-amp: variable gain control

Instrumentation: gain, offset adjustment

Programmable voltage to current conversions

Programmable filters, delays, time constants

Programmable power supply

Sensor calibration

Related Products



AD5292BRUZ-20

Analog Devices, Inc 14TSSOP



AD5242BRZ10

Analog Devices, Inc SOIC-16



AD5142ABCPZ10-RL7

Analog Devices, Inc LFCSP-16



AD8400ARZ10

Analog Devices, Inc SOIC-8



AD5293BRUZ-20

Analog Devices, Inc TSSOP-14



AD8403ARZ10

Analog Devices, Inc SOIC-24



AD5254BRUZ10

Analog Devices, Inc TSSOP20



AD5270BRMZ-20

Analog Devices, Inc MSOP-10