

# ADG1213YRUZ

Data Sheet

2 pF OffCap, 1 pC Qinj  $\pm$  15/12 V Quad SPST Switches; Package: TSSOP; No of Pins: 16; Temperature Range: Industrial

Manufacturers	Analog Devices, Inc	and and
Package/Case	TSSOP-16	han 1
Product Type	Analog Switch ICs	mmm
RoHS	Rohs	
Lifecycle		Images are for reference only
Please submit RFQ for ADG1213YRUZ or Email to us: sales@ovaga.com We will contact you in 12 hours.		

### **General Description**

The ADG1211 / ADG1212 / ADG1213 are monolithic complementary metal-oxide semiconductor (CMOS) devices containing four independently selectable switches designed on an iCMOS® (industrial CMOS) process. iCMOS is a modular manufacturing process combining high voltage CMOS and bipolar technologies. It enables the development of a wide range of high performance analog ICs capable of 33 V operation in a footprint that no previous generation of high voltage devices has been able to achieve. Unlike analog ICs using conventional CMOS processes, iCMOS components can tolerate high supply voltages while providing increased performance, dramatically lower power consumption, and reduced package size.

The ultralow capacitance and charge injection of these switches make them ideal solutions for data acquisition and sample-and-hold applications, where low glitch and fast settling are required. Fast switching speed coupled with high signal bandwidth make the devices suitable for video signal switching.

iCMOS construction ensures ultralow power dissipation, making the devices ideally suited for portable and battery-powered instruments.

The ADG1211 / ADG1212 / ADG1213 contain four independent single-pole/single-throw (SPST) switches. The ADG1211 and ADG1212 differ only in that the digital control logic is inverted. The ADG1211 switches are turned on with Logic 0 on the appropriate control input, while Logic 1 is required for the ADG1212. The ADG1213 has two switches with digital control logic similar to that of the ADG1211; the logic is inverted on the other two switches. The ADG1213 exhibits break-before-make switching action for use in multiplexer applications.

Each switch conducts equally well in both directions when on and has an input signal range that extends to the supplies. In the off condition, signal levels up to the supplies are blocked.

Product Highlights

Ultralow capacitance.

<1 pC charge injection.

3 V logic-compatible digital inputs: = 0.8 V.

No VL logic power supply required.

Ultralow power dissipation:  $<0.03 \mu$ W.

16-lead TSSOP and 3 mm  $\times$  3 mm LFCSP packages.

#### Features

1 pF off capacitance

2.6 pF on capacitance

33 V supply range

 $120~\Omega$  on resistance

Fully specified at  $\pm 15$  V,  $\pm 12$  V

No VL supply required

3 V logic-compatible inputs

Rail-to-rail operation

16-lead TSSOP and 16-lead LFCSP

Typical power consumption: <0.03 µW

#### **Related Products**



ADV7181CBSTZ Analog Devices, Inc LQFP-64



AD724JR Analog Devices, Inc SOIC-16



ADV7391WBCPZ Analog Devices, Inc



LFSCP-3 ADV7341BSTZ

Analog Devices, Inc LQFP-64



## AD8170AR Analog Devices, Inc

SOP8

ADV7393BCPZ



Analog Devices, Inc LFCSP-VQ-40

#### ADV7390BCPZ

Analog Devices, Inc OFN32



QFN32 ADUM4160BRIZ

Analog Devices, Inc SOIC-16

Application Automatic test equipment

Data acquisition systems

- Battery-powered systems
- Sample-and-hold systems

Audio signal routing

Video signal routing

Communication systems