

ADG1212YRUZ-REEL7

Data Sheet

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

Manufacturers <u>Analog Devices, Inc</u>

Package/Case TSSOP-16

Product Type Analog Switch ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADG1212YRUZ-REEL7 or <u>Emailto-us: sales@ovaga.com</u> We will contact you in 12 hours.

RFO

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	Application
1 pF off capacitance	Automatic test equipment
2.6 pF on capacitance	Data acquisition systems
33 V supply range	Battery-powered systems
$120~\Omega$ on resistance	Sample-and-hold systems
Fully specified at $\pm 15 \text{ V}$, $\pm 12 \text{ V}$	Audio signal routing
No VL Supply required	Video signal routing
3 V logic-compatible inputs	Communication systems
Rail-to-rail operation	
16-lead TSSOP and 16-lead LFCSP	
Typical Power Consumption (<0.03μW)	
ADG1212-EP supports defense and aerospace applications (AQEC standard)	
Download(pdf)	
Military temperature range: -55°C to +125°C	
Controlled manufacturing baseline	
One assembly/test site	
One fabrication site	
Enhanced product change notification	
Qualification data available on request	
V62/12617 DSCC Drawing Number	





Related Products



ADV7181CBSTZ

Analog Devices, Inc LQFP-64



AD724JR

Analog Devices, Inc SOIC-16



ADV7391WBCPZ

Analog Devices, Inc LFSCP-3



AD8170AR

Analog Devices, Inc SOP8



ADV7393BCPZ

Analog Devices, Inc LFCSP-VQ-40



ADV7390BCPZ

Analog Devices, Inc QFN32



ADV7341BSTZ

Analog Devices, Inc
LQFP-64



Analog Devices, Inc SOIC-16