

# HMC241ALP3E

# RF Switch SP4T 100MHz to 4GHz 25dB 16-Pin LFCSP EP Cut Tape

Manufacturer:	Analog Devices, Inc
Package/Case:	QFN
Product Type:	Switches
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Active



Images are for reference only

Inquiry

## **General Description**

The HMC241ALP3E is a general-purpose, nonreflective, 100 MHz to 4 GHz single-pole, four-throw (SP4T) switch manufactured using a gallium arsenide (GaAs) process. This switch offers high isolation of 43 dB typical at 2 GHz, low insertion loss of 0.7 dB at 2 GHz, and on-chip termination of the isolated ports.

The on-chip circuitry allows the HMC241ALP3E to operate at a single, positive supply voltage range of 3 V to 5 V. This switch requires two positive logic control voltages. The HMC241ALP3E includes an on-chip, binary two to four line decoder that provides logic control from two logic input lines to select one of the four radio frequency (RF) lines.

The HMC241ALP3E is available in a 3 mm  $\times$  3 mm, 16-lead LFCSP package. The HMC7992 is the silicon version of this switch and features better performance up to higher frequencies.

## **Key Features**

Broadband frequency range: 100 MHz to 4 GHz

Nonreflective 50  $\Omega$  design

Low insertion loss: 0.7 dB at 2 GHz

High isolation: 43 dB at 2 GHz

High input linearity at 250 MHz to 4 GHz

1 dB compression (P1dB): 29 dBm typical

Third order intercept (IP3): 47 dBm typical

- High power handling
- 28.5 dBm through path
- 25 dBm terminated path
- Single positive supply: 3 V to 5 V
- Integrated 2 to 4 line decoder
- 16-lead, 3 mm  $\times$  3 mm LFCSP package
- ESD rating: 250 V (Class 1A)
- Pin compatible with the
- HMC241ALP3E supports defense and aerospace applications (AQEC standard)
- Download the
- Military temperature range (-55°C to +125°C)
- Controlled manufacturing baseline
- One assembly/test site
- Product change notification

Qualification data available on request

### **Recommended For You**

HMC624ALP4E	HMC952ALP5GE	HMC361S8GE
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
QFN24	QFN	SOP-8
HMC253AQS24E	HMC346MS8G	HMC1119LP4ME
HMC253AQS24E Analog Devices, Inc	HMC346MS8G Analog Devices, Inc	HMC1119LP4ME Analog Devices, Inc

### Application

- Cellular/4 G infrastructure
- Wireless infrastructure
- Automotive telematics

Mobile radios

Test equipment

#### HMC659LC5

Analog Devices, Inc

QFN

## HMC1021LP4E

Analog Devices, Inc QFN

# HMC662LP3E

Analog Devices, Inc

QFN

### HMC909LP4E

Analog Devices, Inc QFN

# HMC241AQS16E

Analog Devices, Inc SSOP16

# HMC8038LP4CE

Analog Devices, Inc QFN16

### HMC564LC4

Analog Devices, Inc QFN

## HMC424LP3E

Analog Devices, Inc QFN

## HMC363S8G

Analog Devices, Inc SOP8