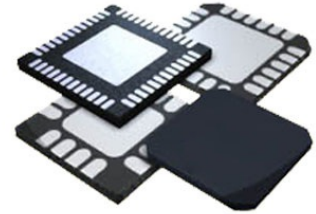


RF Switch SP4T 100MHz to 4GHz 25dB 16-Pin QFN EP T/R



Images are for reference only

[Inquiry](#)

Manufacturer: [Analog Devices, Inc](#)

Package/Case: QFN

Product Type: Switches

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

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 × 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 Ω 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 $+125^{\circ}\text{C}$)

Controlled manufacturing baseline

One assembly/test site

Product change notification

Qualification data available on request

Application

Cellular/4 G infrastructure

Wireless infrastructure

Automotive telematics

Mobile radios

Test equipment

Recommended For You

HMC624ALP4E

Analog Devices, Inc
QFN24

HMC952ALP5GE

Analog Devices, Inc
QFN

HMC361S8GE

Analog Devices, Inc
SOP-8

HMC253AQS24E

Analog Devices, Inc
QFN

HMC346MS8G

Analog Devices, Inc
MSOP8

HMC1119LP4ME

Analog Devices, Inc
QFN

HMC659LC5

Analog Devices, Inc

QFN

HMC909LP4E

Analog Devices, Inc

QFN

HMC564LC4

Analog Devices, Inc

QFN

HMC1021LP4E

Analog Devices, Inc

QFN

HMC241AQS16E

Analog Devices, Inc

SSOP16

HMC424LP3E

Analog Devices, Inc

QFN

HMC662LP3E

Analog Devices, Inc

QFN

HMC8038LP4CE

Analog Devices, Inc

QFN16

HMC363S8G

Analog Devices, Inc

SOP8