

HMC7992LP3DE

Data Sheet

RF Switch SP4T 100MHz to 6GHz 25dB 16Pin LFCSP EP T/R

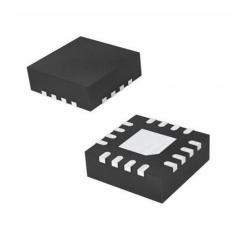
Manufacturers <u>Analog Devices, Inc</u>

Package/Case 16-VFQFN, CSP

Product Type RF Switches

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for HMC7992LP3DE or Email to us; sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The HMC7992 is a general-purpose, nonreflective, 0.1 GHz to 6.0 GHz, silicon, single-pole, four-throw (SP4T) switch in aleadless, surface-mount package. The switch is ideal for cellular infrastructure applications, offers high isolation of 45 dB typical at 2 GHz, and a low insertion loss of 0.6 dB at 2 GHz. It offers excellent power handling capability up to 6.0 GHz, with input power of 1 dB compression point (P1dB) of 35 dBm at 5 V operation. The HMC7992 has good low frequency input power handling below 0.1 GHz and can operate well down to 10 kHz, with a typical 1 dB compression of 21 dBm and an IIP3 of 37 dBm at 1 MHz.

The on-chip circuitry allows the HMC7992 to operate at a single, positive supply voltage range from 3.3 V to 5 V, and as well as a single, positive control voltage from 0 V to 1.8 V/3.3 V/5.0 V. A 2:4 decoder integrated in the switch requires only two controlled input signals, with a positive control voltage range from 0 V to 1.8 V/3.3 V/5.0 V, to select one of the four radio frequency (RF) paths.

Features

Nonreflective, 50Ω design

High isolation: 45 dB typical at 2 GHz

Low insertion loss: 0.6 dB at 2 GHz

High power handling

33 dBm through path

27 dBm terminated path

High linearity

1 dB compression (P1dB): 35 dBm typical

Input third-order intercept (IIP3): 58 dBm typical

ESD rating: 2 kV human body model (HBM), Class 2

Single positive supply: 3.3 V to 5.0 V

Standard TTL-, CMOS-, and 1.8 V-compatible control 16-lead, 3 mm × 3 mm LFCSP package (9 mm2)

Pin compatible with the

Related Products



HMC3653LP3BE
Analog Devices, Inc
QFN-12



HMC253AQS24
Analog Devices, Inc

24-SSOP (0.154, 3.90mm Width)

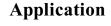


HMC358MS8GE Analog Devices, Inc MSOP-8



HMC453ST89E

Analog Devices, Inc
ST89E



Cellular/4G infrastructure

Wireless infrastructure

Automotive telematics

Mobile radios

Test equipment



HMC441LP3E
Analog Devices, Inc
QFN-16



HMC948LP3E
Analog Devices, Inc
LP3



HMC490
Analog Devices, Inc
SMD



HMC618ALP3E
Analog Devices, Inc
QFN-16