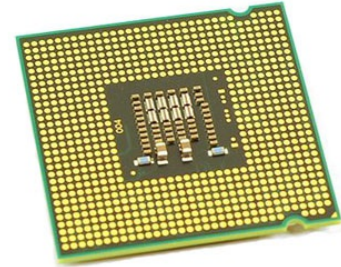


Nonreflective, 100 MHz to 44 GHz Silicon SP4T Switch

Manufacturers	Analog Devices, Inc
Package/Case	24-Terminal LGA (3mm x 3mm x 0.828mm)
Product Type	Switches
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for ADRF5042BCCZN or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADRF5042 is a nonreflective SP4T switch manufactured in the silicon on insulator (SOI) process.

The ADRF5042 operates from 100 MHz to 44 GHz with an insertion loss of lower than 3.2 dB and an isolation of higher than 35 dB. The device has a RF input power handling capability of 24 dBm for both through and terminated paths.

The ADRF5042 requires a dual-supply voltage of +3.3 V and -3.3 V. The device employs CMOS- and low voltage transistor to transistor logic (LVTTTL)-compatible controls.

The ADRF5042 has enable and logic select controls to feature all off state and port mirroring, respectively.

The ADRF5042 is pin compatible with the ADRF5043 low frequency cutoff version, which operates from 9 kHz to 44 GHz.

The ADRF5042 comes in a 24-terminal, 3 mm × 3 mm, RoHS compliant, land grid array (LGA) package and can operate from -40°C to +105°C.

Applications

Features

Ultrawideband frequency range: 100 MHz to 44 GHz

Nonreflective 50 Ω design

Low insertion loss:

1.8 dB up to 18 GHz

2.8 dB up to 40 GHz

Application

Industrial Scanners

Test instrumentation

Cellular infrastructure—millimeterwave (mmWave) 5G

Military radios, radars, electronic counter measures (ECMs)

Microwave radios and very small aperture terminals (VSATs)

3.2 dB up to 44 GHz

High isolation:

50 dB at 18 GHz

39 dB at 40 GHz

35 dB at 44 GHz

High input linearity:

P0.1dB:26 dBm typical

IP3: 47 dBm typical

1.8 dB up to 18 GHz

2.8 dB up to 40 GHz

3.2 dB up to 44 GHz

50 dB at 18 GHz

39 dB at 40 GHz

35 dB at 44 GHz

P0.1dB:26 dBm typical

IP3: 47 dBm typical

High power handling

24 dBm through path

24 dBm terminated path

All off state control

Logic select control

No low frequency spurs

Settling time (0.1 dB final RF output): 30 ns

24-terminal, 3 mm × 3 mm land grid array (LGA) package

Pin compatible with ADRF5043, low frequency cutoff version

24 dBm through path

24 dBm terminated path

Related Products



[ADG467BRSZ](#)

Analog Devices, Inc
SSOP-20



[ADG201ABQ](#)

Analog Devices, Inc
DIP-16



[ADP3050AR-3.3](#)

Analog Devices, Inc
SOP-8



[ADG512BR](#)

Analog Devices, Inc
SOP-16



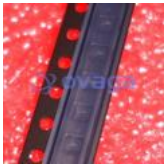
[ADG467BRSZ-REEL](#)

Analog Devices, Inc
SSOP-20



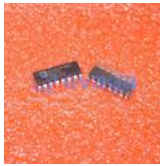
[ADG888BCBZ-REEL7](#)

Analog Devices, Inc
16 ball WLCSP



[ADG852BCPZ-REEL7](#)

Analog Devices, Inc
LFCSP10



[ADG438FBNZ](#)

Analog Devices, Inc
DIP16