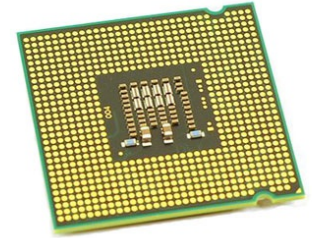


RF Switch SPDT 100MHz to 44GHz 55dB 20-Pin LGA EP Cut

Tape



Images are for reference only

Manufacturer: [Analog Devices, Inc](#)

Package/Case: LGA

Product Type: Switches

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

[Inquiry](#)

General Description

The ADRF5026 is a nonreflective, single-pole, double-throw (SPDT) radio frequency (RF) switch manufactured in a silicon process.

The ADRF5026 operates from 100 MHz to 44 GHz with better than 3.8 dB of insertion loss and 45 dB of isolation. The ADRF5026 features an all off control, where both RF ports are in an isolation state. The ADRF5026 has a nonreflective design and both of the RF ports are internally terminated to 50 Ω .

The ADRF5026 requires a dual-supply voltage of +3.3 V and -3.3 V. The device employs complimentary metal-oxide semiconductor/low-voltage transistor-transistor logic (CMOS/LVTTL) logic-compatible controls.

The ADRF5026 is pin-compatible with the ADRF5027 low frequency cutoff version, which operates from 9 kHz to 44 GHz.

The ADRF5026 RF ports are designed to match a characteristic impedance of 50 Ω . For ultrawideband products, impedance matching on the RF transmission lines can further optimize high frequency insertion loss and return loss characteristics. Refer to the Narrow-Band Impedance Matching section for an example of a matched circuit that achieves a flat insertion loss response of 2.4 dB from 28 GHz to 43 GHz.

The ADRF5026 comes in a 20-terminal, 3 mm \times 3 mm, RoHS-compliant, land grid array (LGA) package and can operate from -40°C to +105°C.

Key Features

Ultrawideband frequency range: 100 MHz to 44 GHz

Nonreflective design

Low insertion loss:

1.2 dB to 18 GHz

1.7 dB to 26 GHz

2.4 dB to 40 GHz

3.8 dB to 44 GHz

High isolation

55 dB to 18 GHz

53 dB to 26 GHz

50 dB to 40 GHz

45 dB to 44 GHz

High input linearity

P1dB: 27 dBm typical

IP3: 53 dBm typical

High power handling

24 dBm insertion loss path

24 dBm isolation path

All off state control

No low frequency spurious signals

0.1 dB RF settling time: 40 ns typical

20-terminal, 3 mm × 3 mm LGA package

Pin compatible with , low frequency cutoff version

Application

Industrial scanners

Test and instrumentation

Cellular infrastructure: 5G mmWave

Military radios, radars, electronic counter measures (ECMs)

Microwave radios and very small aperture terminals (VSATs)

Recommended For You

ADF4153BCPZ

Analog Devices, Inc

QFN

ADF5355BCPZ

Analog Devices, Inc

LFCSP32

AD8318ACPZ

Analog Devices, Inc

LFCSP

AD6620ASZ

Analog Devices, Inc
QFP

ADF4107BCPZ

Analog Devices, Inc
QFN

ADL5513ACPZ-R7

Analog Devices, Inc
LFCSP-16

AD8319ACPZ

Analog Devices, Inc
LFCSP

ADRF6755ACPZ

Analog Devices, Inc
QFN

ADL5535ARKZ-R7

Analog Devices, Inc
SOT89

AD608AR

Analog Devices, Inc
SOP16

ADF4107BRUZ-REEL7

Analog Devices, Inc
TSSOP16

ADRF6780ACPZN

Analog Devices, Inc
QFN

AD8317ACPZ

Analog Devices, Inc
LFCSP

AD608ARZ

Analog Devices, Inc
SOP16

AD8318ACPZ-REEL7

Analog Devices, Inc
LFCSP