

RF Switch SP4T 0.009MHz to 44GHz 36dB 24-Pin LGA EP



General Description

The ADRF5043 is a nonreflective, SP4T switch manufactured in the silicon on insulator (SOI) process. The ADRF5043 operates from 9 kHz to 44 GHz with an insertion loss of lower than 2.5 dB and an isolation of higher than 36 dB. The device has a RF input power handling capability of 24 dBm for both through and terminated paths. The ADRF5043 requires a dual-supply voltage of +3.3 V and ?3.3 V. The device employs CMOS- and low voltage transistor to transistor logic (LVTTL)-compatible controls. The ADRF5043 has enable and logic select controls to feature all off state and port mirroring, respectively. The ADRF5043 is pin compatible with the ADRF5042 fast switching version, which operates from 100 MHz to 44 GHz. The ADRF5043 comes in a 24-terminal, 3 mm \times 3 mm, RoHS compliant, land grid array (LGA) package and can operate from $?40^{\circ}$ C to $+105^{\circ}$ C.

Key Features	Application
Ultrawideband frequency range: 9 kHz to 44 GHz	Industrial Scanners
Nonreflective 50 Ω design	
Low insertion loss:	Test instrumentation
1.5 dB at 18 GHz	Cellular infrastructure-millimeterwave (mmWave) 5G
2.4 dB at 40 GHz	Military radios, radars, electronic counter measures (ECMs)
2.5 dB at 44 GHz	Microwave radios and very small aperture terminals (VSATs)
High isolation:	
44 dB at 18 GHz	
39 dB at 40 GHz	
36 dB at 44 GHz	
High input linearity:	
P0.1dB: 26 dBm typical	
IP3: 48 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): 6 μs
- 24-terminal, 3 mm \times 3 mm LGA package
- Pin compatible with ADRF5042, fast switching version

Recommended For You

ADF4153BCPZ	ADF5355BCPZ	AD8318ACPZ
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
QFN	LFCSP32	LFCSP
AD6620ASZ	ADF4107BCPZ	ADL5513ACPZ-R7
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
QFP	QFN	LFCSP-16

AD8319ACPZ	ADRF6755ACPZ	ADL5535ARKZ-R7
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
LFCSP	QFN	SOT89
AD608AR	ADF4107BRUZ-REEL7	ADRF6780ACPZN
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc
SOP16	TSSOP16	QFN
AD8317ACPZ	AD608ARZ	AD8318ACPZ-REEL7
Analog Devices, Inc	Analog Devices, Inc	Analog Devices, Inc

LFCSP

SOP16

LFCSP