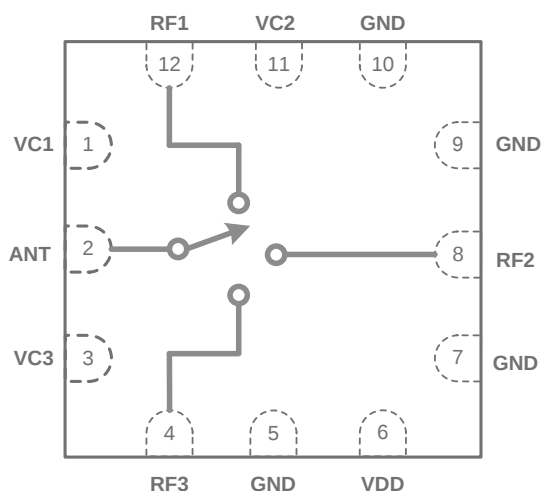


CMOS SP3T ANTENNA SWITCH

Block Diagram



Description

RFX333 is a single-pole, triple-throw (SP3T) antenna switch developed in bulk CMOS technology. The device is optimized for wireless applications requiring high linearity and low insertion loss, such as WLAN IEEE 802.11b/g/n and Bluetooth in the 2.4GHz frequency range.

The RFX333 has simple and low-voltage CMOS control logic, and requires minimal external components. All DC-blocking capacitors are integrated on-chip to minimize PCB footprint. RFX333 is assembled in a tiny 1.6x1.6x0.45mm 12-Lead Quad Flat No-Lead (QFN) package. The ultra-compact size and low profile makes the RFX333 an ideal RF switch solution for mobile handset and smartphone platforms.

Applications

- ▶ 802.11b/g/n
- ▶ Bluetooth
- ▶ Handsets/Smartphones
- ▶ Mobile/Portable Devices
- ▶ Consumer Electronics
- ▶ Other 2.4GHz Radio Platforms

Parameters	Typical	Conditions
Operation Frequency	2.4 - 2.5GHz	
Insertion Loss	0.7dB	Including Losses of All On-Chip DC-Block Capacitors.
Isolation	25dB	
Return Loss	-15dB	
Second Harmonic	-70dBc	Pin=+23dBm
Third Harmonic	-70dBc	Pin=+23dBm
Input 0.1dB Compression Point	+29dBm	VDD=3.6V
Switching ON/OFF Time	150 nS	
DC Supply Voltage	3 - 4.8V	Nominal VDD=3.6V
RF Port Impedance	50-Ohm	Single-ended
Logic Control Signal	High Enable	CMOS Logic, <0.3V Low, >1.2V High
Logic Control Current	1uA	
Shut-down Current	1uA	
Package	12-QFN	1.6mm x 1.6mm x 0.45mm

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This product brief is a general list of parameters to provide information on the capabilities of this device and is subject to change without notice.