

PRODUCT SUMMARY

SKY19257-684LF: 0.1 to 3.8 GHz SP4T GPIO Antenna Tuning Switch

Applications

- Aperture tuning

Features

- Broadband frequency range: 0.1 to 3.8 GHz
- V_{peak}: 42 V
- R_{ON}: 2 Ω
- C_{OFF}: 189 fF
- Output shunt switches reduce unwanted resonances
- Control logic: GPIO
- Small size QFN (10-pin, 1.1 × 1.5 × 0.5 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



Skyworks Green™ products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green™*, document number SQ04-0074.

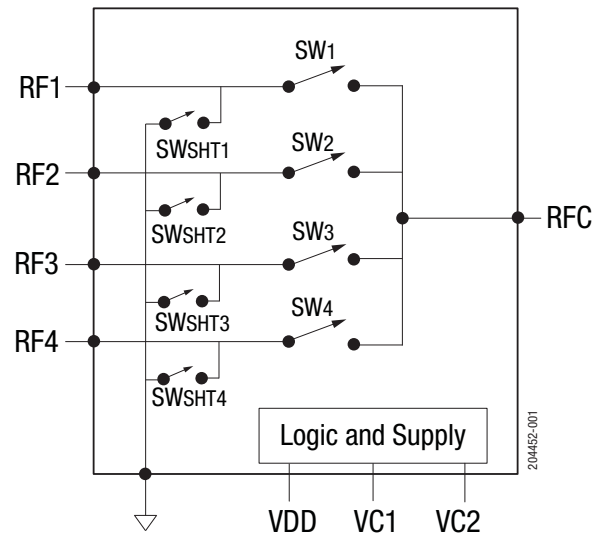


Figure 1. SKY19257-684LF Block Diagram

Description

The SKY19257-684LF is a Quad Flat No-Lead (QFN) single-pole, four-throw switch designed for antenna tuning applications that require very low ON resistance, low OFF capacitance. The device incorporates shunts on switch outputs to improve isolation between arms. The switch can be used for either series or shunt tuning applications. No external DC blocking capacitors are required on the RF paths as long as there is no DC voltage on the RF line. The switch can operate over the temperature range of -40 °C to +90 °C.

Switching is controlled by two CMOS/TTL compatible control voltage inputs (VC1 and VC2). Depending on the logic voltage level applied to the control pin, the RFC pin is connected to one of four switched RF outputs (RF1, RF2, RF3, or RF4) by using a low insertion loss path, while the path between the RFC pin and the other RF pins is in isolation.

The SKY19257-684LF is provided in a small size, 10-pin, 1.5 × 1.1 × 0.45 mm (typical) QFN package.

A functional block diagram is shown in Figure 1.

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY19257-684LF	0.1 to 3.8 GHz SP4T GPIO Antenna Tuning Switch	SKY19257-684EK1

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