

PRODUCT SUMMARY

SKY19225-001: 0.1 to 2.7 GHz SP4T High-Power Antenna Tuning Switch in a WLCSP Package

Applications

- Antenna tuning
- GSM transmit
- WCDMA/LET FDD/TDD transmit/receive
- Impedance tuning

Features

- Broadband frequency range: 0.1 to 2.7 GHz
- Low ON-state resistance and OFF-state capacitance
- High-power and peak-voltage handling (+42 dBm/40 V typical)
- No external DC blocking capacitors required
- Small WLCSP (11-bump, 1.685 × 1.685 × 0.547 mm maximum, 262 μm diameter, 400 μm pitch) package (MSL1, 260 °C per JEDEC J-STD-020)



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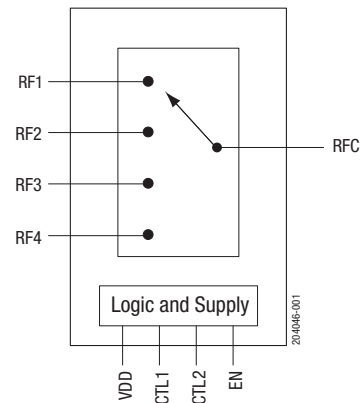


Figure 1. SKY19225-001 Block Diagram

Description

The SKY19225-001 is a wafer level chip scale package (WLCSP) single-pole, four-throw (SP4T) switch designed for antenna tuning applications that require very low RON and COFF. The SKY19225-001 can also be used for LTE/WCDMA/GSM transmit applications. Switching is controlled by an integrated GPIO interface with two control pins and an Enable pin. Depending on the logic voltage level applied to the control pins, the antenna port is connected to one of the four switched RF outputs through a low insertion loss path, while the path between the antenna port and the other RF ports is in a high-isolation state.

No external DC blocking capacitors are required as long as no DC voltage is applied on any RF path.

The SKY19225-001 is provided in a compact 11-bump, 1.685 × 1.685 × 0.547 mm WLCSP that meets requirements for board-level assembly. Bump diameters are 262 microns with a minimum bump pitch of 400 microns.

A functional block diagram is shown in Figure 1.

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY19225-001: SP4T Switch	SKY19225-001	SKY19225-001-EVB

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