

PRODUCT SUMMARY

SKY19003-001: 0.6 to 3.0 GHz Dual SPST (2xSPST) Shunt Switch (Two-Bit Control) in a WLCSP Package

Applications

- Antenna aperture tuning and dynamic matching for cellular handsets, tablets, and data cards

Features

- Broadband frequency range: 0.6 to 3.0 GHz
- Two RF shunts to ground:
 - Low RON: 4.3 Ω
 - Low COFF: 170 fF
- RF voltage handling in the OFF state: 80 V peak
- High linearity for carrier aggregation applications
- Supply voltage: 2.4 to 4.8 V
- Control line voltage: 1.3 to 3.0 V (control voltage high)
- Low current consumption: 40 μA typical
- Ultra-small WLCSP (8-bump, 1.277 x 1.377 x 0.4 mm typical, 217 μm diameter, 400 μm pitch) package (MSL1, 260 °C per JEDEC J-STD-020)



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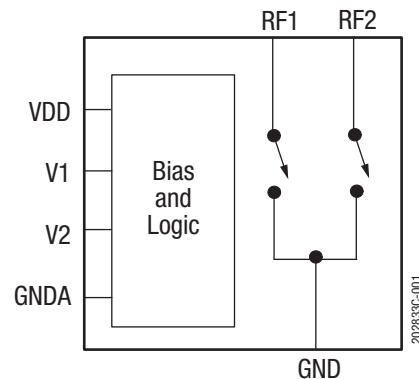


Figure 1. SKY19003-001 Block Diagram

Description

The SKY19003-001 is a wafer level chip scale package (WLCSP) dual-shunt, single-pole, single-throw (2xSPST) switch with integrated logic and bias block. Both paths are connected on one side to a single RF ground bump.

The SKY19003-001 linearity is high enough to meet carrier aggregation requirements. The part is designed to sustain a peak voltage of 80 V typical without going to breakdown.

The logic block operates with a 1.8 V high control voltage and requires a 2.85 V nominal VDD supply.

The SKY19003-001 is provided in a compact 8-bump, 1.277 x 1.377 x 0.4 mm WLCSP that meets requirements for board-level assembly. Bump diameters are 217 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
SKY19003-001: Dual SPST Switch	SKY19003-001	SKY19003-001-EVB

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