

**PRODUCT SUMMARY**

# SKY13698-694LF: 0.4 to 5.9 GHz DPDT Low Insertion Loss/High Isolation Switch

**Applications**

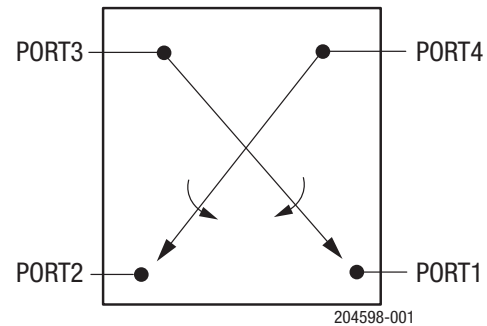
- LTE systems
- Main/Diversity antenna swapping

**Features**

- Very low insertion loss: 0.27 dB @ 1.0 GHz
- High isolation: 30 dB @ 3.8 GHz
- Single control voltage input
- Broadband frequency range: 0.4 to 5.9 GHz
- No DC blocking capacitors required
- Positive control voltage range: 1.35 to 2.8 V
- GSM power handling
- Small QFN (12-pin, 1.83 × 1.83 × 0.5 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



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**Figure 1. SKY13698-694LF Block Diagram**

**Description**

The SKY13698-694LF is a state-of-the-art CMOS, silicon-on-insulator (SOI) double-pole, double-throw (DPDT) switch. The switch provides high-linearity performance, low insertion loss, and high isolation.

Switching is controlled by one voltage input, CTRL1. Depending on the logic voltage level applied to this pin, the PORT1 and PORT2 pins connect to one of the two other RF port pins (PORT3 or PORT4) through a low insertion loss path, while maintaining a high isolation path to the alternate port. No external DC blocking capacitors are required on the RF path as long as no DC voltage is applied externally.

The SKY13698-694LF DPDT switch is provided in a compact Quad Flat No-Lead (QFN) 1.83 × 1.83 × 0.5 mm package. A functional block diagram is shown in Figure 1.

## Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY13698-694LF: DPDT Switch	SKY13698-694LF	SKY13698-694EK1

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