

**PRODUCT SUMMARY**

# SKY13547-490LF: 5 to 1800 MHz Ultra-High Linearity SPDT 75 Ω Switch

**Applications**

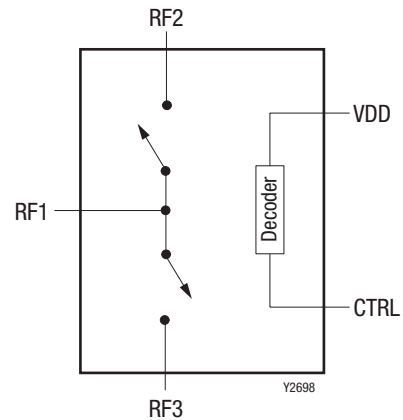
- Cable modem
- Set-top box
- Filter band switching
- Relay replacement to switch between DOCSIS 3.0 and DOCSIS 3.1 configurations

**Features**

- Ultra-high linearity performance
- IMD2, 3: < -110 dBc typ. @ P<sub>IN</sub> = +68 dBmV F<sub>IN</sub> = 880 MHz  
< -80 dBc typ. @ P<sub>IN</sub> = +68 dBmV F<sub>IN</sub> = 40 MHz
- Low insertion loss: 0.3 dB @ 1.0 GHz
- High IP0.1dB: +38 dBm
- No external DC blocking capacitors required
- DC supply voltage: 2.5 V to 4.8 V
- Small, QFN (12-pin, 2 x 2 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. SKY13547-490LF Block Diagram**

**Description**

The SKY13547-490LF is a single-pole, double-throw (SPDT) 75 Ω switch. The high linearity and low insertion loss of the SKY13547-490LF meet the most stringent requirements of DOCSIS 3.1 applications.

The switch is a “reflective short” on the isolated port.

The SKY13547-490LF SP2T switch is provided in a compact Quad Flat No-Lead (QFN) 2 x 2 mm package. A functional block diagram is shown in Figure 1.

## Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY13547-490LF: SPDT 75 Ω Switch	SKY13547-490LF	SKY13547-490LF-EVB

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### Наши контакты:

**Телефон:** +7 812 627 14 35

**Электронная почта:** [sales@st-electron.ru](mailto:sales@st-electron.ru)

**Адрес:** 198099, Санкт-Петербург,  
Промышленная ул, дом № 19, литера Н,  
помещение 100-Н Офис 331