PRODUCT SUMMARY

SKY12248-492LF: 2.3 to 4.2 GHz 120 W High-Power SPDT Switch

Applications

• High-power fail-safe switch for TDD 4G and 5G systems
• High-power switch for macro base stations
• High Power Distributed Antenna System (DAS)

Features

• Compact, integrated high-power switch
• Small PCB footprint with minimal external components
• 120 W average power handling at 120 °C case temperature
• Low TX/RX insertion loss
• High TX to RX isolation
• Low DC power consumption
• Small QFN (20-pin, 5 × 5 mm) Pb-free package (MSL3, 260 °C per JEDEC J-STD-020)

Figure 1. SKY12248-492LF Block Diagram

Description

The SKY12248-492LF is a compact single-pole, double-throw (SPDT) fail-safe switch for TDD 4G and 5G applications. It can be tuned to specific RF bands within the range of 2.3 to 4.2 GHz by modifying select external SMT components.

This device features high-power handling at hot, low TX and RX insertion loss, and high isolation with low DC power consumption. The device requires minimal external components, enabling a smaller PCB footprint.

The device is provided in a 5 × 5 mm, 20-pin Quad Flat No-Lead (QFN) package. A functional block diagram is shown in Figure 1. Pin-to-pin compatible with SKY12255 (160 W fail safe switch).
Ordering Information

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<th>Evaluation Board Part Number</th>
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<tr>
<td>SKY12248-492LF</td>
<td>2.3 to 4.2 GHz High-Power SPDT Switch</td>
<td>SKY12248-492EK1 2.3 to 3.8 GHz</td>
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<td>SKY12248-492EK2 3.8 to 4.2 GHz</td>
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