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Proposed

RFSW2100

45W GaN-ON-SiC REFLECTIVE SPDT RF SWITCH

Package: QFN, 12-Pin, 3mm x 3mm

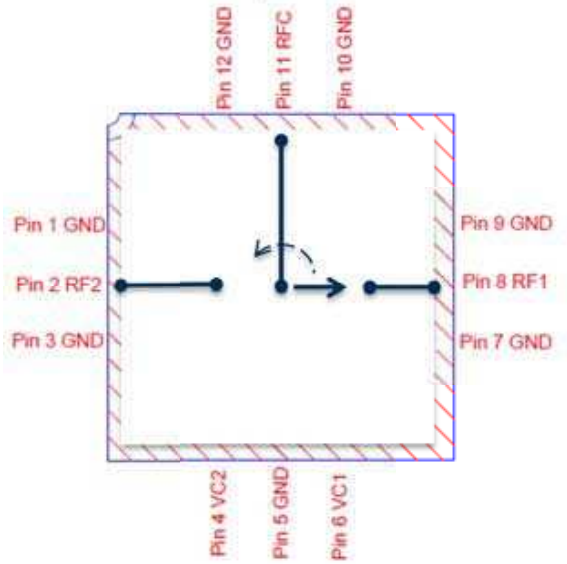
RoHS

Features

- Broadband Operation 30MHz to 6GHz
- Advanced GaN HEMT Technology
- 2GHz Typical Performance
  - Insertion Loss <0.4dB
  - Isolation >39dB
- Small Form Factor: 3mm x 3mm
- High Power Capability: P0.1dB of 45W at -60V V_{LOW}
- Designed to present 50Ω I/O

Applications

- Military Communication
- Electronic Warfare
- Commercial Wireless Infrastructure
- Cellular and WiMAX Infrastructure
- Civilian and Military Radar
- General Purpose Broadband Amplifiers
- Public Mobile Radios
- Industrial, Scientific, and Medical



Functional Block Diagram

Product Description

The RFSW2100 is a GaN-on-SiC high power discrete RF switch designed for military and commercial wireless infrastructure, industrial/scientific/medical and general purpose broadband RF control and switching applications. Using an advanced high power density Gallium Nitride (GaN) semiconductor process, the RFSW2100 is able to achieve low insertion loss and high isolation with better than 10dB return loss across a wide band from 30MHz to 6GHz within a miniature package with proper heat sinking and assembly. The RFSW2100 is an SPDT RF switch suitable for many applications with 45W CW input power compression capability under controlled conditions, VSWR (3:1) and 25°C T_{CASE} as well as <0.4dB insertion loss, and >39dB small signal isolation at 2GHz.

Optimum Technology Matching® Applied

☐ GaAs HBT	☐ SiGe BiCMOS	☐ GaAs pHEMT	☑ GaN HEMT
☐ GaAs MESFET	☐ Si BiCMOS	☐ Si CMOS	☐ BiFET HBT
☐ InGaP HBT	☐ SiGe HBT	☐ Si BJT	☐ LDMOS

7628 Thorndike Road, Greensboro, NC 27409-9421 · For sales or technical support, contact RFMD at **(+1) 336-678-5570** or **customerservice@rfmd.com**.

Please contact
RFMD Technical Support
at (336) 678-5570
for more information.

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