rfmd.com

## **Preliminary**

## **RFFM4501**

3.0V TO 5.0V, 4.9GHz TO 5.85GHz 802.11a/n/ac FRONT END MODULE

Package: Laminate, 16-pin, 3.0mm x 3.0mm x 0.975mm

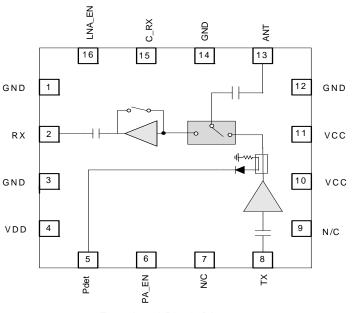


#### **Features**

- Integrated 4.9GHz to 5.85GHz Amplifier, SPDT TX/RX Switch, LNA with Bypass, and Power Detector Coupler
- P<sub>OUT</sub> = 19.5dBm, 11a/n, 5V
   <3% Dynamic EVM</li>
- P<sub>OUT</sub> = 17dBm, 11n, 3.3V 2.5% Dynamic EVM

#### **Applications**

- IEEE802.11a/n/ac WiFi Applications
- 4.9GHz to 5.85GHz ISM Band Applications
- Portable Battery-Powered Equipment
- WiFi Access Points, Gateways and Set Top Boxes



Functional Block Diagram

### **Product Description**

The RFFM4501 provides a complete integrated solution in a single Front End Module (FEM) for WiFi 802.11a/n/ac systems. The ultra small form factor and integrated matching minimizes the layout area in the customer's application and greatly reduces the number of external components. This simplifies the total front end solution by reducing the bill of materials, system footprint, and manufacturability cost. The RFFM4501 integrates a Power Amplifier (PA), Single Pole Double Throw switch (SPDT), LNA with bypass, and a power detector coupler for improved accuracy. The device is provided in a 3mm x 3mm x 1.0mm, 16-pin laminate package. This module meets or exceeds the RF Front End needs of IEEE 802.11a/n WiFi RF systems.

#### **Ordering Information**

RFFM4501PCK-410 RFFM4501 Eval Board with 5-piece bag
RFFM4501SR 5-Piece bag
RFFM4501SR 100-Piece reel
RFFM4501TR7 2500-Piece reel
RFFM4501SQ 25-Piece bag

#### **Optimum Technology Matching® Applied**

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

RF MICRO DEVICES®, RRMD®, Optimum Technology Matching®, Enabling Wireless Connectivity<sup>10</sup>, PovenStar®, Publica Wireless TOTAL RADIO™ and UltimateBlue™ are trademarks of RRMD. LLC. BLUETOOTH is a trade mark owned by Bulletonth Sig. U.S. L.S.A. and UltimateBlue™ respective owners. 2012 LR BM (intern the case in the promotive of the promotive of

# Preliminary



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