

# QUAD-BAND GSM/GPRS Tx MODULE WITH UMTS TRANSMIT/RECEIVE PORTS

Package: Module 30-pin, 6mm x 6mm x 1mm

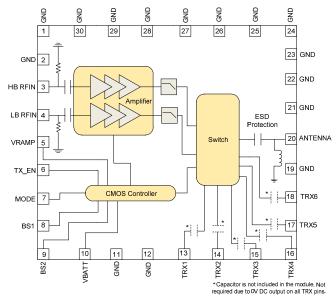


#### **Features**

- High Efficiency at Rated P<sub>OUT</sub>
   V<sub>BATT</sub> = 3.5
   GSM850/EGSM900 = 43%
   DCS1800/PCS1900 = 36%
- Integrated Power Flattening Circuit
- Integrated V<sub>BATT</sub> Tracking Circuit
- 8kV Robust ESD Protection at Antenna Port
- No External Routing
- No External DC blocking needed on TRx Ports
- Low TRx Insertion Loss for 3G efficiency and improved Rx sensitivity
- Six high linearity TRx Ports
- High TRx to TRx isolation
- OdBm to 6dBm Drive Level, >50dB of Dynamic Range

#### **Applications**

- Single thru Quad Band UMTS handsets and connected devices including TDSCDMA and CDMA
- GSM850/EGSM900/DCS1800/ PCS1900 Products
- 3V Multimode Mobile Applications
- GPRS Class 12 Compliant



**Functional Block Diagram** 

### **Product Description**

The RF3235 is a quad-band (GSM850/EGSM900/DCS1800/PCS1900) GSM/GPRS Class 12-compliant transmit module with six transmit/receive ports for UMTS use that also serve as GSM Rx ports. This transmit module builds upon RFMD's leading PowerStar integrated power control technology, SOI (silicon-oninsulator) switch technology, and integrated transmit filtering for best-in-class harmonic performance. The results are high performance, reduced solution size, and ease of implementation. The device is designed for use as the final portion of the transmitter section in a GSM850/EGSM900/DCS1800/PCS1900/UMTS handset and eliminates the need for a PA-to-antenna switch module matching network. The device provides  $50\Omega$  matched input and output ports requiring no external matching components.

The RF3235 features RFMD's latest integrated power-flattening circuit, which significantly reduces current and power variation into load mismatch. Additionally, a  $V_{BATT}$  tracking feature is incorporated to maintain switching performance as supply voltage decreases. The RF3235 also integrates an ESD filter to provide excellent ESD protection at the antenna port.

Optimum Technology Matching® Applied			
GaAs HBT GaAs MESFET InGaP HBT	☐ SiGe BiCMOS ☐ Si BiCMOS ☐ SiGe HBT	☐ GaAs pHEMT  Si CMOS ☐ Si BJT	☐ GaN HEMT☐ BIFET HBT☐ LDMOS

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## **RF3235**



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