

UMTS PICOCELL FRONT END MODULE

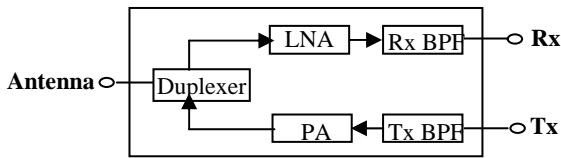
DESCRIPTION

The MODEL VFM1001A is a UMTS Node B Local Area front end module (FEM). It is designed to replace all of the RF components that would be typically used in a Node B local area front end. It is RoHS compliant and lead-free. It has a patent pending design.

FEATURES

- Scalable PA capable of delivering 20 dBm at the antenna port while meeting TS25.104 R6.
- Distributed filters offering excellent isolation and harmonic suppression.
- LNA with Bypass mode to increase receiver linearity

FEM Simplified Block Diagram



Typical values:

TRANSMIT

Frequency range	2110 – 2170 MHz
PA supply voltage	5 - 8V
PA current	250 mA
Power @ antenna	20 dBm
ACLR @ 20 dBm	50 dBc
Gain	10 dB

Attenuation (2.25–12.75 GHz) > 30 dB

Tx to Rx isolation @ antenna port 85 dB typical
 Tx input to Rx output isolation 65 dB typical

Size: 31.0 x 25.1 x 6.75 mm
 Temp. range : -30C to 75C

RECEIVE

Frequency range	1920 – 1980 MHz
LNA supply voltage	4V
LNA current	14 mA
Noise figure	4 dB
Gain	13 dB

Attenuation (2.17–12.75 GHz) > 30 dB