# Model VFM1017A

## UMTS PICOCELL FRONT END MODULE

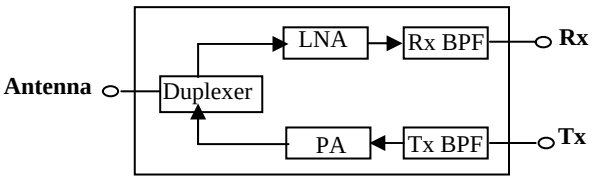
## DESCRIPTION

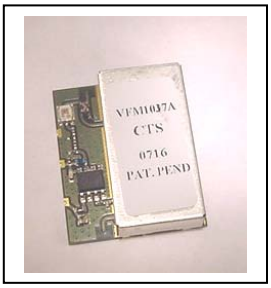
The MODEL VFM1017A is a low power UMTS Node B Local Area front end module (FEM). It is designed to replace all of the RF components that would be typically used in a Node B local area front end. It is RoHS compliant and lead-free. It has a patent pending design.

## FEATURES

- PA capable of delivering 7 -10 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 Block Diagram**




### Typical specifications:

| TRANSMIT | | RECEIVE | |
|---|---|---|---|
| Frequency range | 2110 - 2170 MHz | Frequency range | 1920 - 1980 MHz |
| Power @ antenna port | 7 - 10 dBm | Gain | 12 dB |
| PA supply voltage | 5V | LNA supply voltage | 4V |
| ACLR @ 10 dBm | 50 dBc . | Noise figure | 4 dB. |
| Gain | 12.5 dB | | |
| Attenuation (2.25-12.75 GHz) > 30 dB | | Attenuation (2.17–12.75 GHz) > 30 dB | |

| | |
|---|---|
| Receiver sensitivity | -120 dB worst case |
| Tx to Rx isolation @ antenna port | 90 dB typical |
| Tx input to Rx output isolation | 65 dB typical |

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