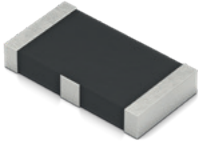


# Standard Transceiver Schematic

## Antenna

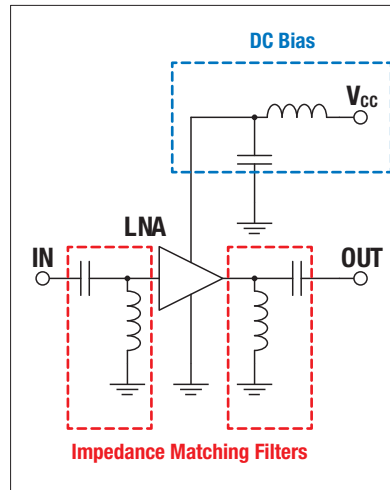
### WE-MCA

Highest size to performance ratio



- SMD multilayer chip antenna
- Extremely low profile
- Omni-directional radiation
- Operating temperature: -40 °C to +85 °C
- Very high performance to size ratio
- Applications: GSM, WLAN, Bluetooth, Home RF, IoT

## LNA (Low-Noise-Amplifier)



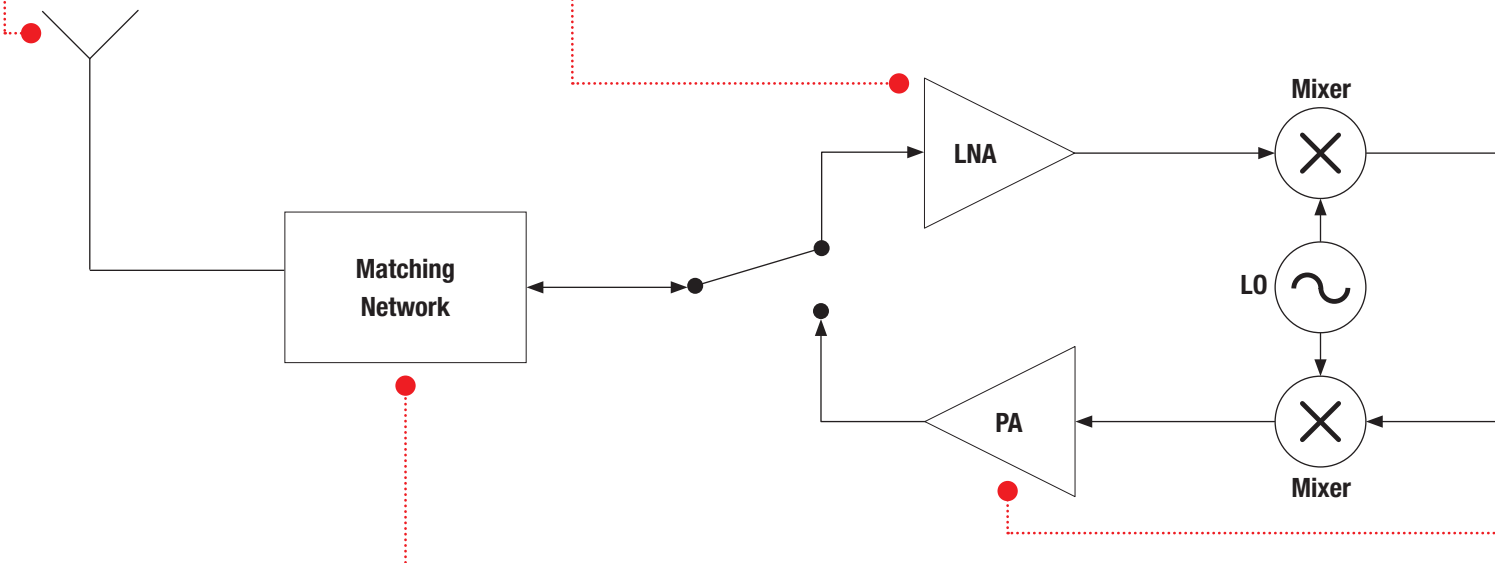
### Inductor

#### e. g. WE-TCI

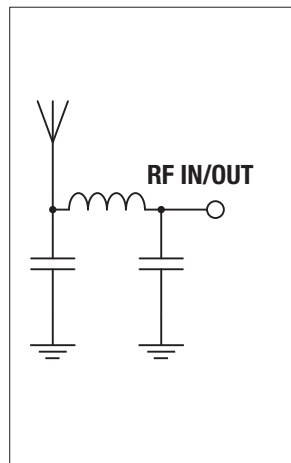
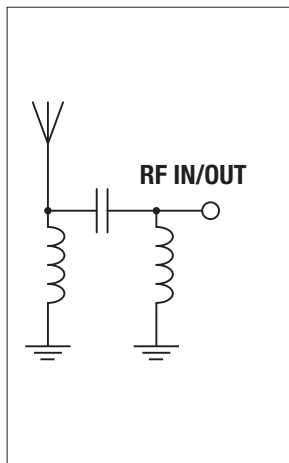
Highest precision in smallest package



- SMD RF thin film inductors
- Very tight inductance tolerances: up to 1 %
- Very low profile
- Sizes: 0201 / 0402



## Matching Network Examples



### Inductor

#### e. g. WE-MK

Highest robustness



- SMD RF multilayer ceramic inductors
- Very high SRF
- High reliability chip inductors
- Sizes: 0201 / 0402 / 0603

### Capacitor


#### WCAP-CSRF

Optimized inner structure for RF applications

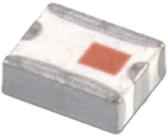


### IF (Intermediate Frequency) Filter

**Low-Pass Filter:**  
**WE-LPF**  
Low insertion loss



**Band-Pass Filter:**  
**WE-BPF**  
High stopband rejection



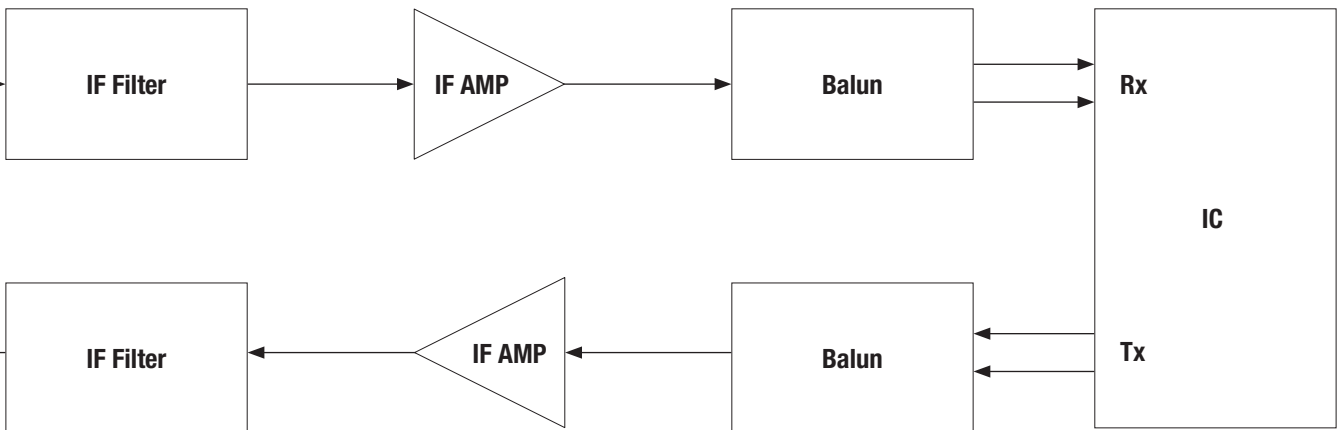
- Power capacity up to 3 W
- Guaranteed filter characteristics over a wide temperature range
- Applications: GSM, WLAN, Bluetooth, wireless communication systems

### Balun

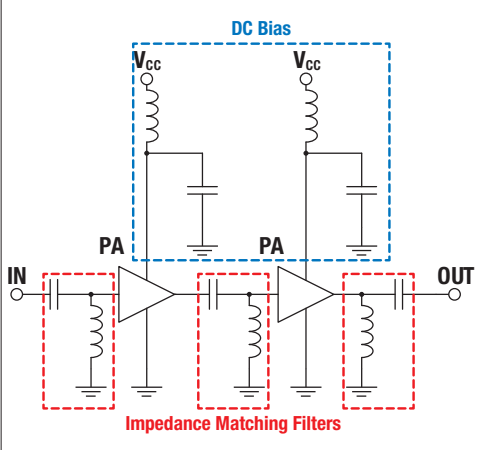
**WE-BAL**  
Precise differential output



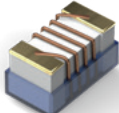
- Low loss SMD balun
- Balanced impedance of 50 to 200  $\Omega$
- Operating temperature: -40 °C to +85 °C
- Power capacity up to 2 W
- Applications: Home RF, WLAN, Bluetooth, ZigBee



### PA (Power Amplifier)

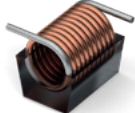


**Inductors**  
e. g. **WE-KI / WE-KI HC**  
Best quality-to-price ratio



- SMD RF wire wound ceramic inductors
- High Q-factor
- Large currents supported
- Inductance tolerances: 2 % and 5 %
- Sizes: 0402 / 0603 / 0805 / 1008

e. g. **WE-CAIR**  
Best performance



- SMD RF air core inductors
- Very high Q-factor
- Very large currents supported
- Inductance tolerances: 2 % and 5 %
- Sizes: 1322 / 1340 / 3136 / 3168 / 4248 / 5910