

2.0-GHz Mixer  
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PMB 2330  
PMB 2331<sup>B6HF</sup>

**General Description**

The PMB 2330, PMB 2331 are low power, double balanced up-/downconversion Gilbert cell mixers up to 2.0 GHz. The PMB 2331 is fabricated using Siemens B6HF silicon bipolar process.

Differential signals and symmetrical circuits are used throughout the mixer. The mixer input can be used in balanced or unbalanced configuration. The mixer outputs are high impedance open collector outputs. The adjustable mixer current allows to improve the mixer performance.

An internal bias driver generates supply voltage and temperature compensated reference voltages.

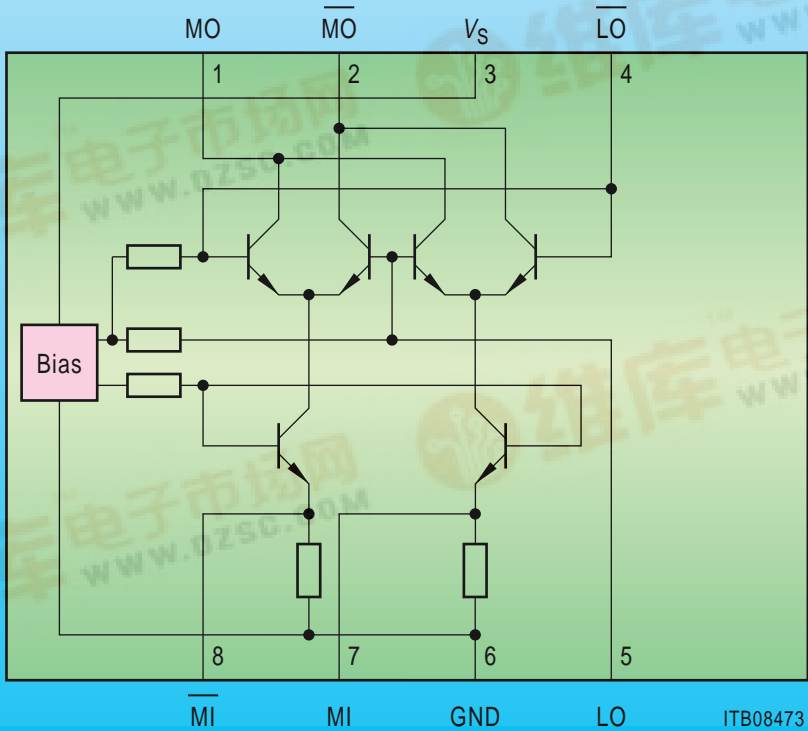
**Applications**

All analog and digital mobile communication systems as up-/downconverter mixer.

Type	Package
PMB 2330-T	P-DSO-8-1 (SMD)
PMB 2331-T	P-DSO-8-1 (SMD)

**Features**

- Low operating current
- Low operating voltage:  
PMB 2330: 3.0 V to 7.0 V  
PMB 2331: 2.7 V to 5.5 V
- Power-down mode
- RF- and IF-frequency range up to 2.0 GHz
- Mixer current adjustable
- Low noise figure
- High conversion gain
- Excellent intercept performance
- Good suppression of input signals at output
- High isolation values
- Few external components
- P-DSO-8 package
- Temperature range – 30 °C to 85 °C



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