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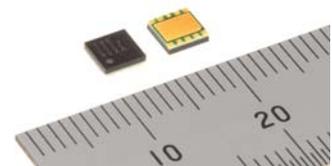
Mitsubishi Electric to Ship InGaP HBT Power Amplifier for WiMAX Terminals

Tokyo, Dec 22, 2009 – Mitsubishi Electric Corporation (TOKYO: 6503) announced today the sale of a new InGaP HBT¹ power amplifier, the MGFS38E2527, for use in WiMAX² subscriber terminal equipment. The module, which measures just 4 mm x 4 mm, produces high output power of 28.5 dBm³ with low distortion. Sample shipments will commence on January 25, 2010.

- 1: Indium gallium phosphide heterojunction bipolar transistor for highly efficient mobile phone applications.
- 2: Worldwide Interoperability for Microwave Access, a 75 Mbps high-speed wireless communication system with a range of 50 kilometers in the case of fixed wireless access.
- 3: An expression of electric power measured in milliwatts. 28.5 dBm=10*log (708 mW)

Details

| Model | Price of Sample (excl. tax) | Sample Shipment Date | Monthly Production |
|-------------|--------------------------------|-------------------------|-----------------------|
| MGFS38E2527 | 1,000 JPY | January 25, 2010 | 100,000 pieces |



Aim of Sale

WiMAX is growing increasingly popular for high-speed wireless communications use due to its extra wide area coverage compared to that of existing high-speed wireless services. To extend the communication range between WiMAX base stations and terminals, there is a growing need for compact power amplifiers for installation in WiMAX terminals such as PC cards and customer premises equipment. Such amplifiers are required to deliver high output with low distortion, while maintaining high radio signal quality.

In the past, Mitsubishi Electric has released a series of InGaP HBT power amplifiers — the small-size MGFS36Exxxx for WiMAX terminals used in mobile and fixed-line communications, and the MGFS39Exxxx, which features industry-leading output power combined with low distortion.

The company now adds the new MGFS38E2527 power amplifier to this lineup. Compared to existing models, this newest amplifier provides more power and less distortion in a smaller package.

Product Features

1) High power with low distortion for wider coverage

The new amplifier achieves low distortion of less than 2.5% EVM⁴ at a high maximum output of 28.5 dBm. Output power is 1.5 dB⁵ higher than that of the existing MGFS36E2527⁶, which will enable both wider service areas and improved signal quality for WiMAX systems.

4: Error Vector Magnitude, an index that shows the accuracy of the modulation signal.

5: The dB is a logarithmic unit used to describe a ratio.

6: 27 dBm (=502 mW), 4.5 mm x 4.5 mm package size.

2) *Small 4 mm x 4 mm package, including peripheral functional circuitry*

The amplifier is produced in a small 4 mm x 4 mm package, which is 20% smaller than that of conventional amplifiers. It includes two functional circuits: a power detector for precise monitoring of output power, and a one-bit step attenuator for easy control of output power. Matching 50 Ω input and output circuits are integrated into the amplifier, eliminating the need for additional matching circuits on the customer's board. The amplifier is expected to reduce both the occupied board area and the number of surface-mounted devices, consequently contributing to the development of smaller, lighter WiMAX terminals.

Main Specifications

| | |
|-------------------------------|-----------------------|
| Frequency Range | f=2.5-2.7 GHz |
| Operating Voltage | Vc=5-6 V, Vref=2.85 V |
| Output Power | 28.5 dBm |
| Linear Power Gain | 35 dB |
| Error Vector Magnitude | 2.5 % @28.5 dBm |
| Power Detector Output Voltage | 1.5 V@28.5 dBm |
| Step Attenuation | 0/25 dB |

Future Developments

Mitsubishi Electric plans to develop 2.3GHz- and 3.5GHz-band amplifiers offering an output of 28.5 dBm by the end of March 2010.

About Mitsubishi Electric

With over 85 years of experience in providing reliable, high-quality products to both corporate clients and general consumers all over the world, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. The company recorded consolidated group sales of 3,665.1 billion yen (US\$ 37.4 billion*) in the fiscal year ended March 31, 2009. For more information visit <http://global.mitsubishielectric.com>

*At an exchange rate of 98 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2009.

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