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**mitsubishi electric announces sale of
internally impedance matched high output power GaAs
FETs for WiMAX base transceiver stations**

Tokyo, November 14, 2006 – Mitsubishi Electric Corporation (President and CEO: Setsuhiro Shimomura) announced today it has finished development of 3 internally impedance matched high output power Gallium Arsenide Field Effect Transistors (GaAs FETs) for 2.5 GHz and 3.5 GHz band WiMAX¹ base transceiver station, and will begin sample shipment on December 20, 2006. The devices operate at low electric current, and have low adjacent channel leakage power.

¹Worldwide Interoperability for Microwave Access: a high-speed wireless communications system with a communication range of 75km(Max.).

Summary of Sale

Model	Output power	Linear power gain	Adjacent channel leakage power	Frequency band ²	Price of sample (ex. Tax)	Sample shipment date	Production
MGFS45B2527C	30W	11dB	-45dBc	2.5-2.7GHz	16,000 yen	Dec. 20	5000 each/month
MGFS45B2325C				2.3-2.5GHz			
MGFC47B3436C	50W	10dB		3.4-3.6GHz	22,600 yen		

²WiMAX has different frequency bands for different regions: North America 2.5-2.7 GHz, Korea and Australia 2.3~2.5 GHz, Europe 3.4-3.6 GHz. There are plans to allocate part of the 2.5-2.7 GHz band in Japan for next generation wireless broadband communication.

Point of Sale

WiMAX systems are a key technology in providing broadband connections in metropolitan areas where laying fiber optic cable is difficult as well as expanding broadband accessing rural areas. To reduce installation and operating costs of WiMAX base transceiver stations, it has become a primary concern to

reduce size and power consumption of components, and to develop lower current and lower distortion power amplifier.

Mitsubishi Electric has produced until now high power devices for Pre-WiMAX base transceiver stations of proprietary system for the American and European markets. With IEEE establishing a global standard system specification, we have developed 3 new GaAs FET internally impedance matched high output power devices, started promotion into the WiMAX base transceiver station business.

Product Features

1) Lowest current and distortion in industry, lower energy consumption in base transceiver station

Signal waveform distortion produces feedback in adjacent channels when power amplifiers are operated at low current, so there is a trade off between current and distortion. We have been able to reduce adjacent channel leakage power (ACP) to $1/6^3$ of previous equivalent output power models⁴ to -45dBc by developing an internally impedance matched circuit that reduces distortion and using a FET chip optimized for each frequency band. -45dBc adjacent channel leakage power at a low quiescent current (0.9A for MGFS45BxxxxC) is the best performance in the industry. This will also reduce its energy consumption to $1/7$ compared to previous models due to low quiescent current (0.9A).

³ For MGFS45B2527C. Typical value of 2.5-2.7 GHz frequency band at 5MHz offset.

⁴ our Pre-WiMAX base transceiver MGFC45A3339

2) Reduced energy consumption, reduced installation and operating costs of base transceiver station

Due to its low energy consumption, the mechanical size of the new transceiver power amplifiers can be reduced in WiMAX base transceiver stations by reducing the size of the power supply circuit and number of components as well as simplifying the heat-sink design, which leads to low installation and operating costs of base transceiver stations.

3) Easy replacement

We use the same metal-ceramic package as previous models with the same dimensions, allowing easy replacement of existing amplifiers.

Future Developments

We plan to develop 5 GHz band devices by December 2007.

Model name		MGFS45B2527C	MGFS45B2325C	MGFC47B3436C
Recommended condition	VDS ⁵	12V	12V	12V
	IDQ ⁶	0.9A	0.9A	1.5A
	RG ⁷	10ohm	10ohm	5ohm

Frequency band	2.5-2.7GHz	2.3-2.5GHz	3.4-3.6GHz
Output power (Po, typical value)	30W	30W	50W
Linear power gain (GLP, typical value)	12dB	12dB	10dB
Adjacent Channel leakage Power (ACP, typical value)	-45dBc	-45dBc	-45dBc

⁵Drain to Source Voltage

⁶Quiescent Drain Current

⁷Gate Series Resistance

About Mitsubishi Electric

With over 80 years of experience in providing reliable, high-quality products to both corporate clients and general consumers all over the world, Mitsubishi Electric Corporation (TSE: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 3,604 billion yen (US\$ 30.8billion*) in the fiscal year ended March 31, 2006. For more information visit <http://global.mitsubishielectric.com>

*At an exchange rate of 117 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2006.