FOR IMMEDIATE RELEASE **No.** 2450

Product Inquiries:
High Frequency & Optical Semiconductor
Global Marketing Department B
Tel +81-3-3218-3014
Sato.Kazuhiko@aj.MitsubishiElectric.co.jp
http://www.mitsubishichips.com/

Media Contact:
Public Relations Division
Mitsubishi Electric Corporation
Tel: +81-3-3218-3380
prd.gnews@nk.MitsubishiElectric.co.jp
http://global.mitsubishielectric.com/news/

MITSUBISHI ELECTRIC ANNOUNCES SALE OF 'MGF4921AM' LOW NOISE GaAs HEMT FOR SATELLITE DIGITAL RADIOS

Tokyo, December 9, 2008 – Mitsubishi Electric Corporation (President and CEO: Setsuhiro Shimomura) announced today it has developed a full-mold package low noise GaAs high electron mobility transistor (HEMT), the MGF4921AM, highly suitable for low noise amplifiers in satellite digital radio reception systems. This product can also be used in low noise amplifiers for C band direct broadcast satellite (DBS) reception systems. Shipment will begin on January 26, 2009.

Summary of Sale

Product	Model	Features	Sample price (Excl. tax)	Shipment date	Production
Low Noise GaAs HEMT	MGF4921AM	NF: 0.35dB Gs: 18.0dB (f=2.4GHz)	30 yen	Jan 26, 2009	500,000/month

Aim of Sale

Satellite digital audio radio service (SDARS), which has become common in North America since 2001, does not require tuning to adapt to regional broadcasting like analog radio services. This convenience has attracted cars to use SDARS for information services such as traffic information and entertainment programs. With similar broadcast data services called digital audio broadcasting (DAB) also expected to start in other regions of the world, the satellite digital radio market is expected to grow globally in the near future.

At the same time, when it comes to reception systems for satellite digital radios, there is an increasing demand for HEMTs, used in low noise amplifiers for these reception systems, and to improve radio sensitivity, there is a need for low noise HEMTs with higher performance.

Mitsubishi Electric will begin shipment of a HEMT with low noise characteristics that are top-level in the industry at a wide range of frequency waves from S to C bands.

Product Features

1) Low noise characteristics, top-level in the industry

It is difficult to balance stability and low noise characteristics when using 12-20GHz low noise GaAs HEMTs at low frequency bands. By optimizing gate width and by improving stability at low frequency

bands, Mitsubishi Electric has improved device noise figure to 0.35dB, an industry top-level low noise characteristic and 0.1 dB lower than the company's 12GHz model, the MGF4953A, when measured at 2.4GHz on a stable matching circuit. Using this product in the first stage of amplifiers, which strictly requires low noise characteristics, improves sensitivity in reception converters for satellite digital radios, helping to expand radio coverage area and decrease production costs in reception converters.

2) An industry standard 4-pin full-mold package, for shorter development periods for satellite communication equipment manufacturers

The MGF4921AM has an industry standard 4-pin full-mold package. An unchanged foot pattern from the previous model will shorten development periods for satellite communication equipment manufacturers.

Future Developments

Mitsubishi Electric will increase its lineup of low noise GaAs HEMTs for the second and third stage in amplifiers with improvements in output power and distortion characteristics.

Other Features

- Recommended bias condition: VDS=2V、ID=15mA (10mA in ref.)
- Noise figure (NFmin.): 0.35dB (f=4GHz, typical), (ref) 0.35dB(f=2.4GHz, typical)
- Associated gain (Gs): 13.0dB (f=4GHz, typical), (ref) 18.0dB(f=2.4GHz, typical)

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 4,049.8 billion yen (US$ 40.5 billion*) in the fiscal year ended March 31, 2008. For more information visit http://global.mitsubishielectric.com

*At an exchange rate of 100 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2008

###