Mitsubishi Electric to launch GaN HEMTs for L to C band amplifiers

Medical Design Technology

The three models are for L to C band (0.5~6 GHz) amplifiers, which are incorporated into base stations for mobile phones, very small aperture terminals and other transmission equipment. Sample shipments will begin from August 2010.

For microwave transmitters, gallium arsenide (GaAs) power amplifiers are most commonly used, but gallium nitride is now garnering more attention, owing to its high breakdown voltage and high saturated electron speed. In March 2010, Mitsubishi Electric became the first company in the world to manufacture GaN HEMTs, launching four models for C-band space applications. HEMTs that use GaN have higher power density, which helps save energy and contributes to making transmitters more compact and
lightweight, and expanded operating life.

Summary of Sale

Product Features
1) GaN HEMT for high-output, high-efficiency, high voltage operation
Lineup of 10 W, 20 W and 40W output amplifiers
Suitable for L to C bands (0.5~6.0 GHz)
Power added efficiency of 46% or higher
High-voltage operation of 47 V

2) Small sized package of 4.4 mm × 14.0 mm
Small sized package helps reduce mounting surface in amplifiers

Other Features

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

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