

Career frequency measurement of the modulated wave using spectrum analyzer

* Application *

The method of calculating the carrier frequency of the modulated wave will be introduced using our spectrum analyzer.

Usually, when measuring frequency, a measuring instrument such as a frequency counter is used. However, when measuring the carrier frequency of the modulated waves such as ASK and QPSK, it can't be correctly measured with a frequency counter because various spectra exist near the carrier frequency. In particular, in the case of a modulated wave used for communication, it is very important to measure the carrier frequency accurately because the deviation of the carrier frequency causes a communication error.

By using our spectrum analyzer, it is possible to solve this problem. The accurate carrier frequency can be calculated by a simple method based on the spectrum of modulated wave measured. Calculation examples of the carrier frequency for the concrete modulated waves are as follows.

* Solution *

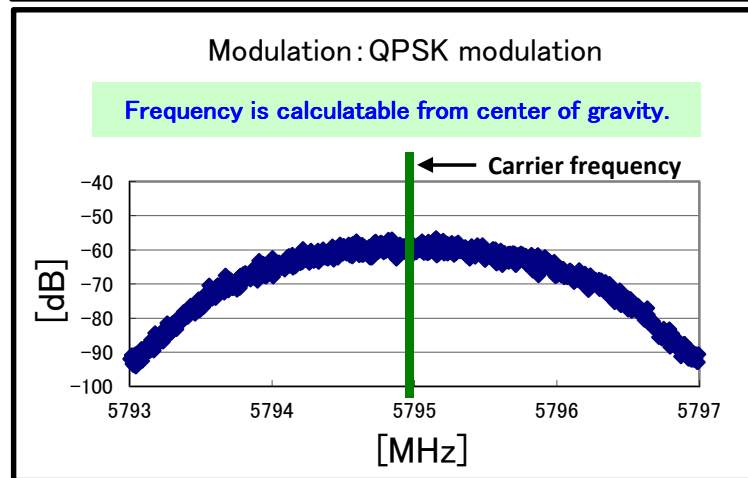
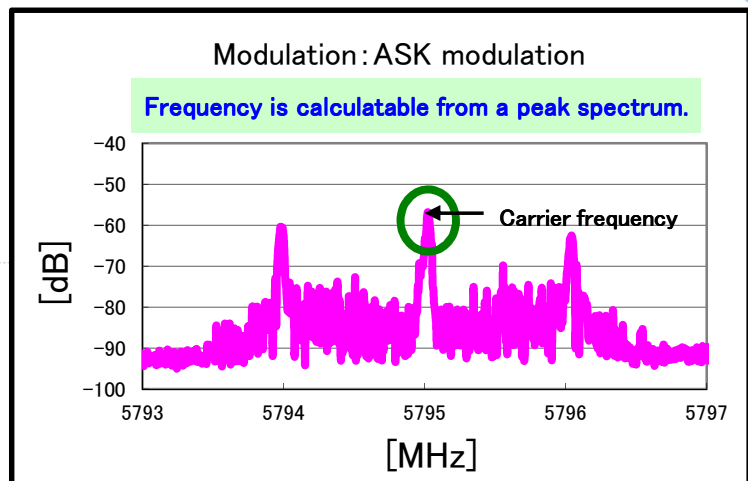
Carrier frequency measurement example of modulated wave



**Spectrum analyzer
MSA458**

Carrier frequency of various modulated waves can be measured !

CSV output of spectrum



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