Anritsu

# Evaluation Solution for Optical Elements and MM Fibers

MS9740A
Optical Spectrum Analyzer

MS9740A-009
Multimode Fiber Interface (50/62.5 µm) Option

Evaluation of the characteristics of optical elements, silicon photonics, etc., using a fiber probe depends on both the measurement environment as well as the measurement conditions due to the coupling efficiency, measurement system, and element type. Additionally, the best measurement efficiency and performance are needed for each measurement environment.

The MS9740A-009 Multimode Fiber Interface Option uses a GI fiber with a core diameter of 62.5 µm in the input section, suppressing reflections and supporting stable spectrum measurements in systems using either 50 or 62.5-µm fiber probes. As an extra benefit, the various sensitivity settings assure the optimum sweep speed for the user's measurement environment.

Silicon photonics evaluation

DFB-LD, VCSEL Element Evaluation
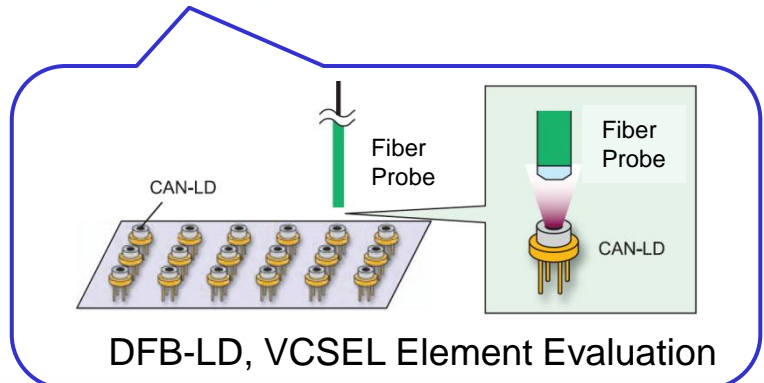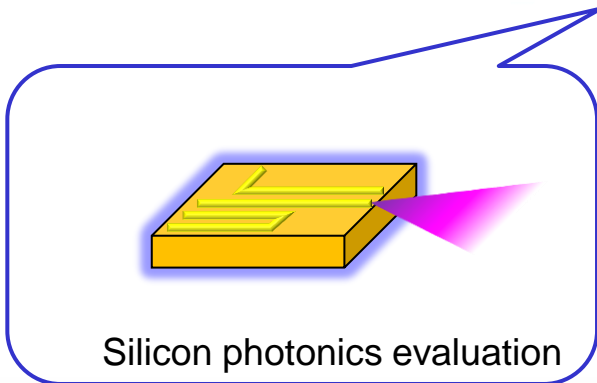
- *High-speed sweeping at 0.2 s per 100-nm span independent of optical input[1]*

- *Various sensitivity settings supporting efficient measurement speed*

- *High resolution performance at all wavelength bands with excellent resolution characteristics in 850-nm band*

- *Industry-best wavelength sensitivity when using MM fiber[2]*

- *Analysis menus supporting DFB and VCSEL element measurements*

[1]: At VBW 10 kHz, 501 sampling points
[2]: At May 2012, using benchtop optical spectrum analyzer

# ■ Supports high-resolution measurement at 850 nm

RMS measurement is recommended to spectrum width analysis of multi-longitudinal mode lasers, such as VCSELs, requiring sufficient resolution to identify modes.
The high resolution performance of the MS9740A at 850 nm supports more accurate spectrum analysis.
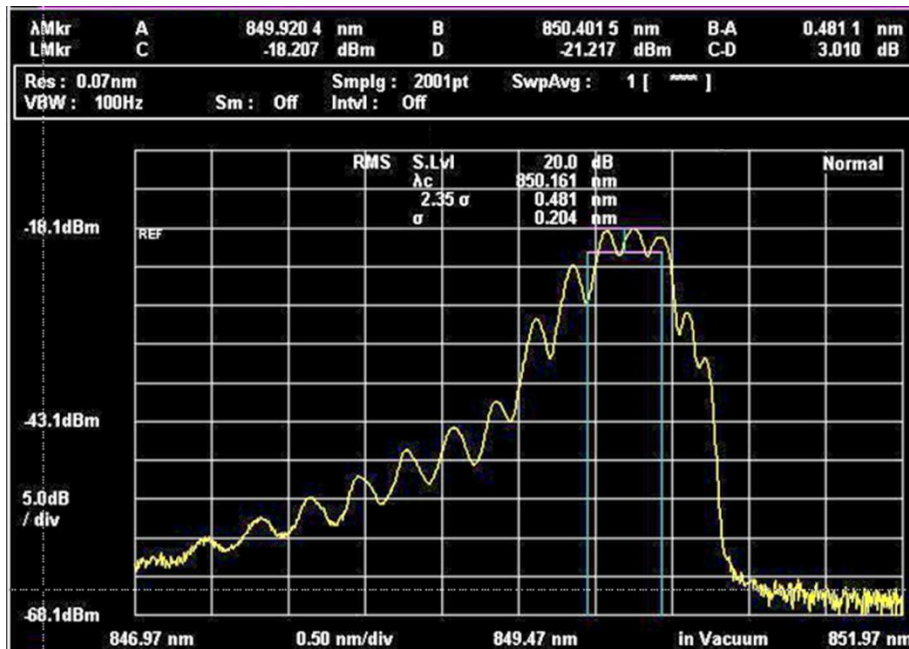
■ Various sensitivity settings for efficient measurement speeds

The measurement level range differs at evaluation of optical elements and devices due to the coupling efficiency, measurement system, and type of optical element. To support efficient measurement speeds, the MS9740A has two new sensitivity settings between the most frequently used –70 and –90 dBm noise levels.
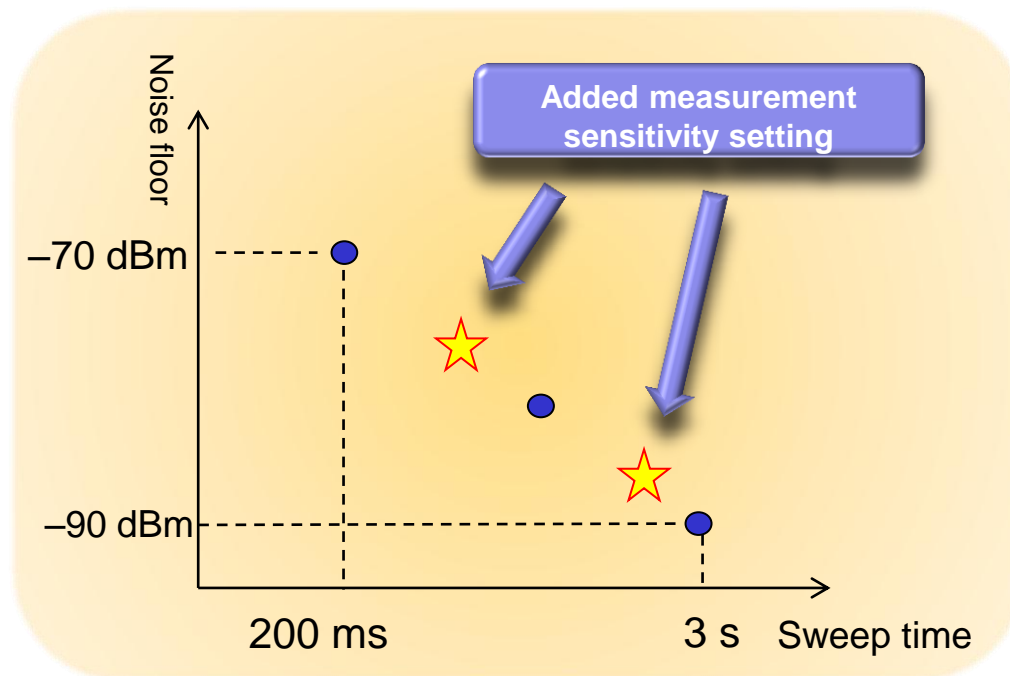
*Using noise floor as standard criterion