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The front end electronics design for broadband high-sensitive light pulse detection

It is of great significance to detect fast weak optical signal in the field of LiDAR. This article proposes a kind of broadband high-sensitive light pulse detection module that uses two-stage amplified circuit to achieve photoelectric conversion and amplification. The test results show that the module can enlarge the light pulse with the wavelength of 1064nm, the repetition frequency of 10MHz, the average power of 1nW. The noise peak is about 50mV, and the output pulse width is within 20ns, which can avoid overlapping when the repetition frequency of light pulse is 10MHz.

Minioral

No

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No

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