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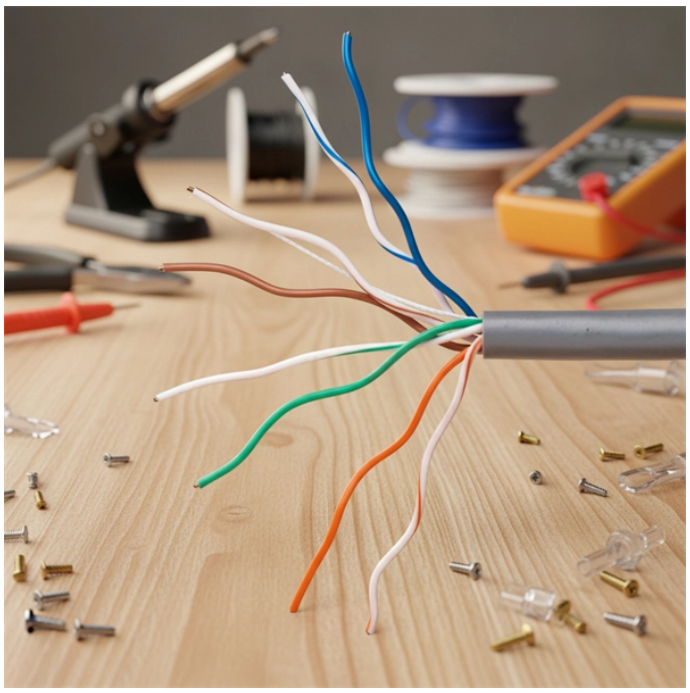
Switching frequency of laser diodes



Switching frequency of laser diodes

We have discussed three different expressions for the linear dependence of the spontaneous emission rate because they are used in the literature when modelling gain switching in ...

For a single mode diode laser to emit light at a specific, stable frequency, the current passing though it should be constant. Therefore, to ensure reliable operation for all applications ...

A gain-switching technique was implemented to the stabilized laser diode, and the generation of a high-contrast frequency comb with narrow lines and tunable line spacing was demonstrated.

Gain-switched laser diodes offer advantages in adjusting pulse repetition rates and compactness compared to mode-locked lasers. However, they may exhibit larger timing jitter and fluctuations in ...

Here we propose a high-repetition-frequency high-power pulse power supply for laser diode driving by using frequency synthesis technique. This technique generates a high repetition ...

Here, we will give some very first insights on our research on cascaded gain-switching of a vertical-cavity surface-emitting laser (VCSEL) optically pumped by gain-switched laser diodes.

Effects of some laser diode parameters, and d.c. and RF drive conditions on the full width at half-maximum (FWHM) of gain switched pulses are investigated for the 1±15 GHz gain switching ...

Between the pulses, the pump current can be kept nonzero but somewhat below laser threshold. Although the pulse energy is small, such gain-switched laser diodes can be used, for example, as ...

A specific characteristic of gain-switched laser diodes is the time-dependent variation of the optical frequency (chirp) during the pulse. This results from the rapid change in carrier density, which affects ...

While some applications only require a laser diode to be run in continuous wave (CW) mode, some applications require the laser diode to either be pulsed or modulated.

Contact Us

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