Monolithic circuit of active quenching and active reset for avalanche photodiodes

(57) It is an integrated circuit capable of determining the quenching and the reset of an avalanche photodiode (SPAD) operating in Geiger mode so as to detect single photons (1) falling on the surface of said photodiode.

The circuit scheme used makes possible to reduce the size of the circuit down to a single semiconductor chip, to reduce the power dissipation and to reduce the cost of the circuit, at the same time keeping the performance at good level.

Fig. 3
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