



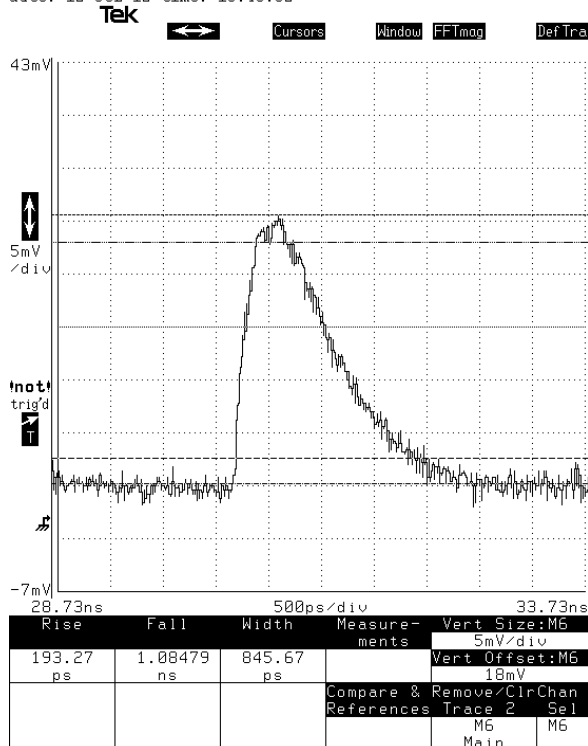
FOR IMMEDIATE PRESS RELEASE
Göttingen, August 1st, 2012

GREATLY IMPROVED HF PERFORMANCE OF ULTRAFAST PHOTO DETECTORS IN THE WAVELENGTH RANGE 800 to 2600 nm

Following the continuous efforts of ALPHALAS GmbH (Göttingen, Germany) to be a worldwide leader in the field of ultrafast photo detectors, a major step towards improving the high-speed performance of photo detectors in the extended infrared range has been realized. In collaboration with a leading European research institute, through a special InGaAs growth and doping process and an originally designed high-frequency topology, a 20 to 30 times reduction of the rise time of the ALPHALAS ultrafast photo detectors UPD-5N-IR2-P and UPD-3N-IR2-P has been achieved. Thus, the rise time of UPD-5N-IR2-P has been reduced from 6 ns to below 200 ps, and the rise time of UPD-3N-IR2-P has been reduced from 3.5 ns to below 150 ps. Correspondingly, the frequency bandwidths have been increased from 60 MHz to more than 300 MHz (UPD-5N-IR2-P) and from 100 MHz to more than 400 MHz (UPD-3N-IR2-P). However, the bandwidths are very conservatively rated. If these are calculated from the rise time, the bandwidths are close to 1 GHz.

The spectral range of UPD-5N-IR2-P spans from 800 to 2600 nm, and for UPD-3N-IR2-P from 800 to 2100 nm. ALPHALAS GmbH claims that these photo detectors are the fastest available on the market for the corresponding spectral ranges.

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An example of the waveform for UPD-5N-IR2-P, taken with a 50 GHz sampling oscilloscope and a modelocked picosecond laser (pulse width 12 ps at 1064 nm), is presented on the left.

The delivery of the greatly improved products is scheduled to start from October, 2012. For orders and technical inquiries please contact the ALPHALAS team at ++49-551-7706147, or via email: sales@alphalas.com

Visit ALPHALAS GmbH at www.alphalas.com