Tests of the MITEL 4D470 4 channel PIN Diode MT receiver array

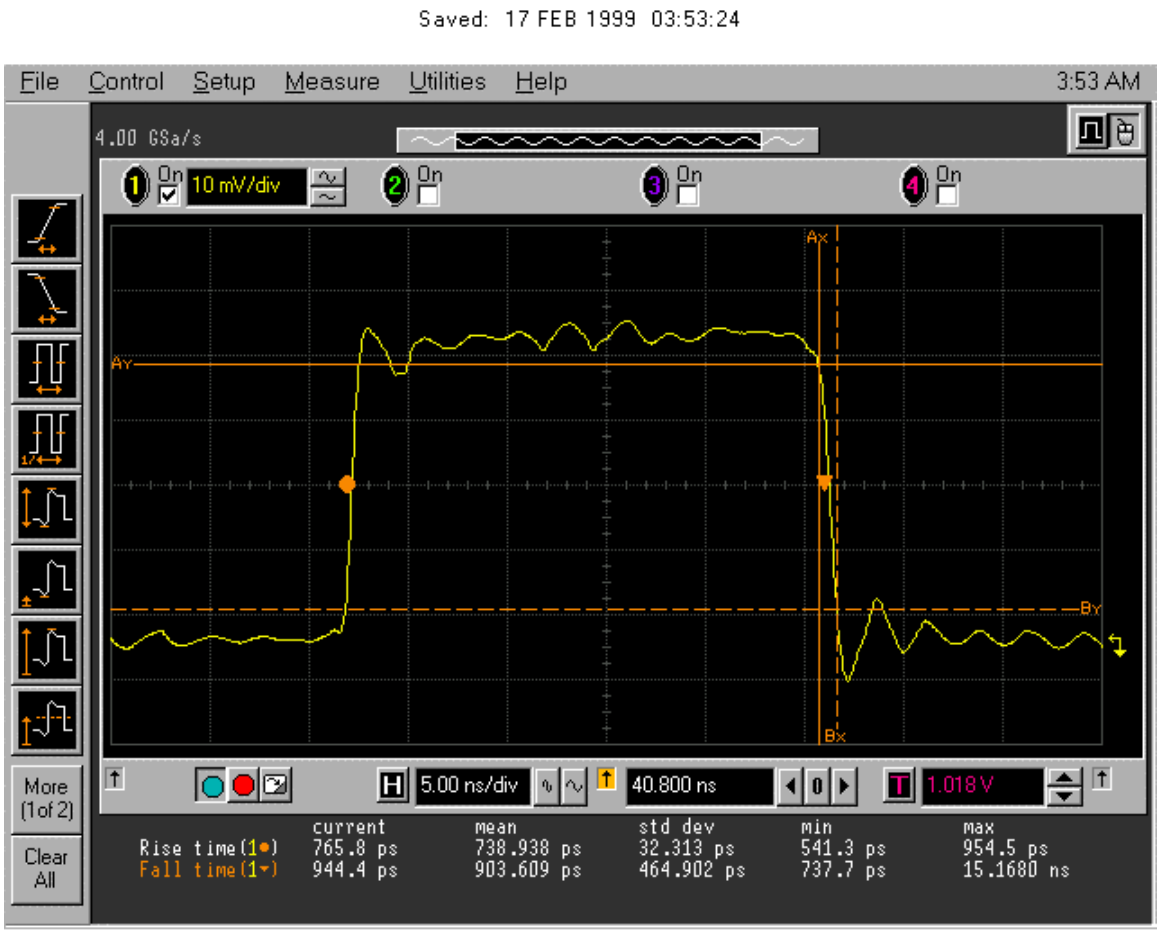
The tests were performed with the individual anodes connected to ground via 50 ohms and a variable voltage supply on the common cathode. Measurements were made using a Hewlett Packard Infinium Oscilloscope and 8135A light power meter, and a Honeywell BIFE4085-32/XAB VCSEL as the light source.

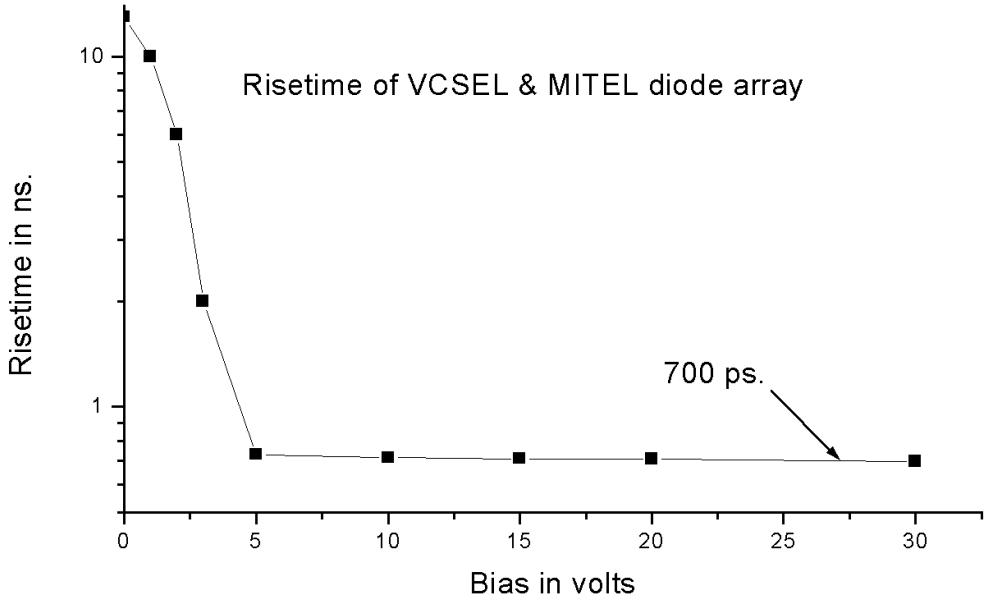
Responsiyily (A[W)
a) 0.58
b) 0.51
c) 0.57

d) 0.6

The light power was measured at the input to the ST to MT fan in.

Total dark current was 2 nA @ 20 volts and 22 degrees C. it was <lnA at 10 volts.
Measured risetime is shown below, and is at the limit of the test setup. DC VCSEL current was ImA. and peak current was 12 mA.





Measured risetime versus bias voltage is shown above.

Conclusions

This initial evaluation showed the MITEL 4D470 to meet its specifications in all respects. It is mechanically robust, and no problems were encountered either with its mounting, or with the mating of the MT connector. Work is ongoing to measure its performance in a complete receiver system.

Alan Rudge, CERN 17th February 99.