
GBTIA : cut-off frequency ?

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Tue, Jul 5, 2011 at 3:23 PM

To: Tullio Grassi <tullio.grassi@gmail.com>

Cc: "Ping.Gui@cern.ch" <Ping.Gui@cern.ch>

Hi Tullio ,

Yes I agree with Ping. I remember that the lower cut off frequency is 1 MHz in the worst case. This frequency depends mainly on the DC current across the photodiode. This DC current depends on the radiation dose. I think that it depends where you will use the VTRX. If it is in an area not subject to radiations , I think can go to a very low bit rate because the lower cut off frequency is low. Otherwise you need to estimate the DC current on across the photodiode.

The attached slide shows a GBTIA test at 200 Mbit/s. It shows the influence of the DC current on the transient response.

Best Regards

Mohsine

Le 05/07/2011 14:52, Gui, Ping a écrit :

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gbtia_dc_insertLowfreq.pdf

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