

FINISAR CORPORATION

**FCBG110SD1CXX,
PVT,10G,SFP+CABLE,LIMITING,MM,0/70C,
850NM VCSEL,PIN,ROHS COMPLIANT**

PRODUCT VALIDATION TEST REPORT

**1185884, Reversion A
DVT,STD PVT,FCBG110SD1CXX**

Apr 17, 2013

Finisar

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Section 1: Executive summary

A standard PVT was performed on FCBG110SD1CXX 10G, SFP+ CABLE, as part of the requirement for DVT phase exit.

Conclusion

The FCBG110SD1CXX 10G, SFP+ CABLE passes this Product Validation Test program per the requirements established in Section 2 of this report.

SECTION 2: PASS CRITERIA AND TEST DATA

| Test Name | Spec Range | Minimum Measured | Maximum Measured | Pass / Total |
|--------------------------------------|-----------------|------------------|------------------|--------------|
| Rx Mask margin(%) | $x > 0$ | 42.00 | 63.00 | 11/11 |
| Rx Eye Differential Amplitude(mV) | $300 < x < 850$ | 532.00 | 598.00 | 11/11 |
| Rx Jitter pp(ps) | $x < 67.9$ | 14.00 | 24.00 | 11/11 |
| Rx Rise Time(ps) | $x > 28$ | 32.40 | 35.60 | 11/11 |
| Rx Fall Time(ps) | $x > 28$ | 32.00 | 38.20 | 11/11 |
| Module supply current(A)(single end) | $x < 0.25$ | 0.11 | 0.13 | 11/11 |
| Power consumption(W)(single end) | $x < 0.875$ | 0.34 | 0.44 | 11/11 |

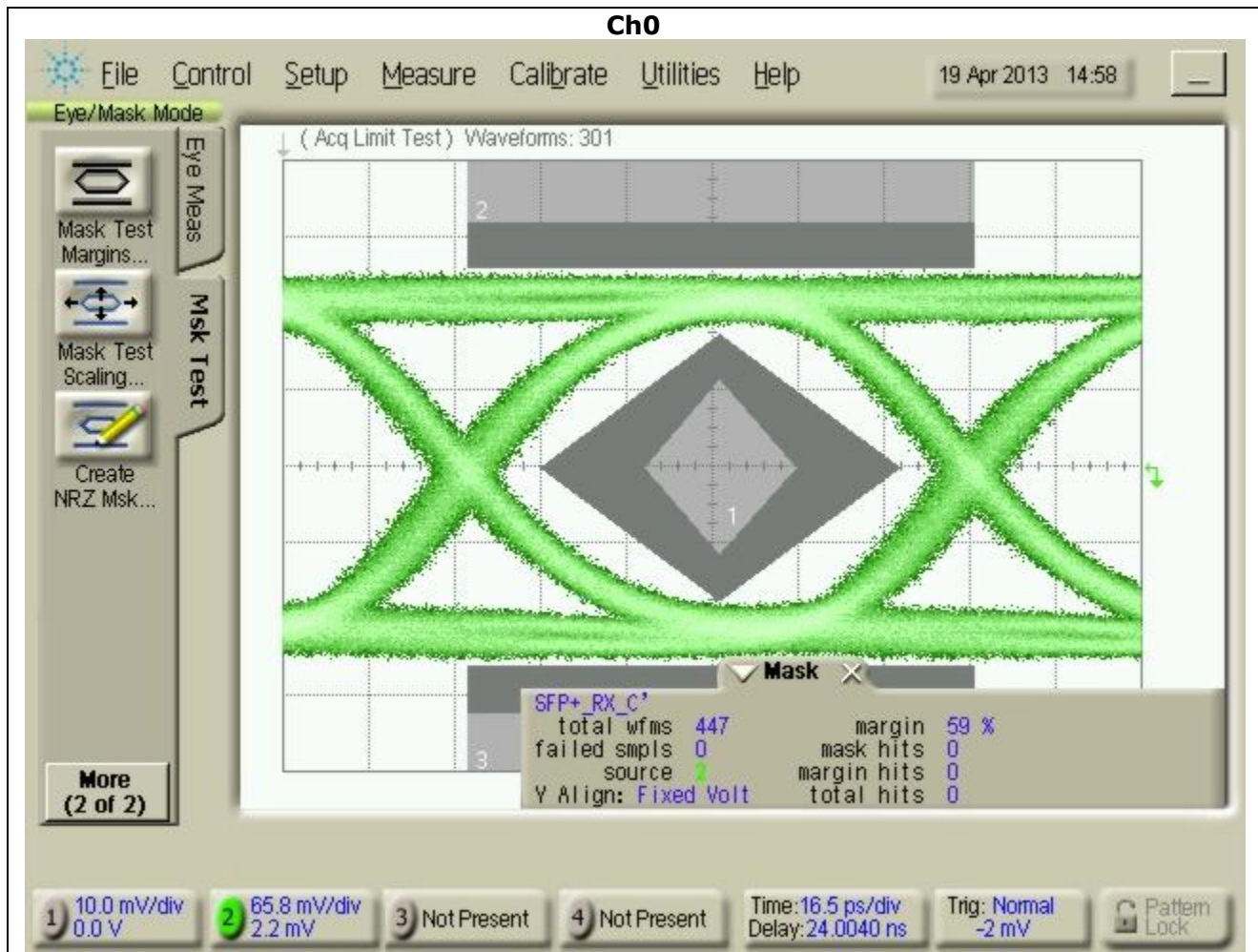
*all test at 10.3125Gb/s, PRBS31

*the length of the cable that been tested is 5M.

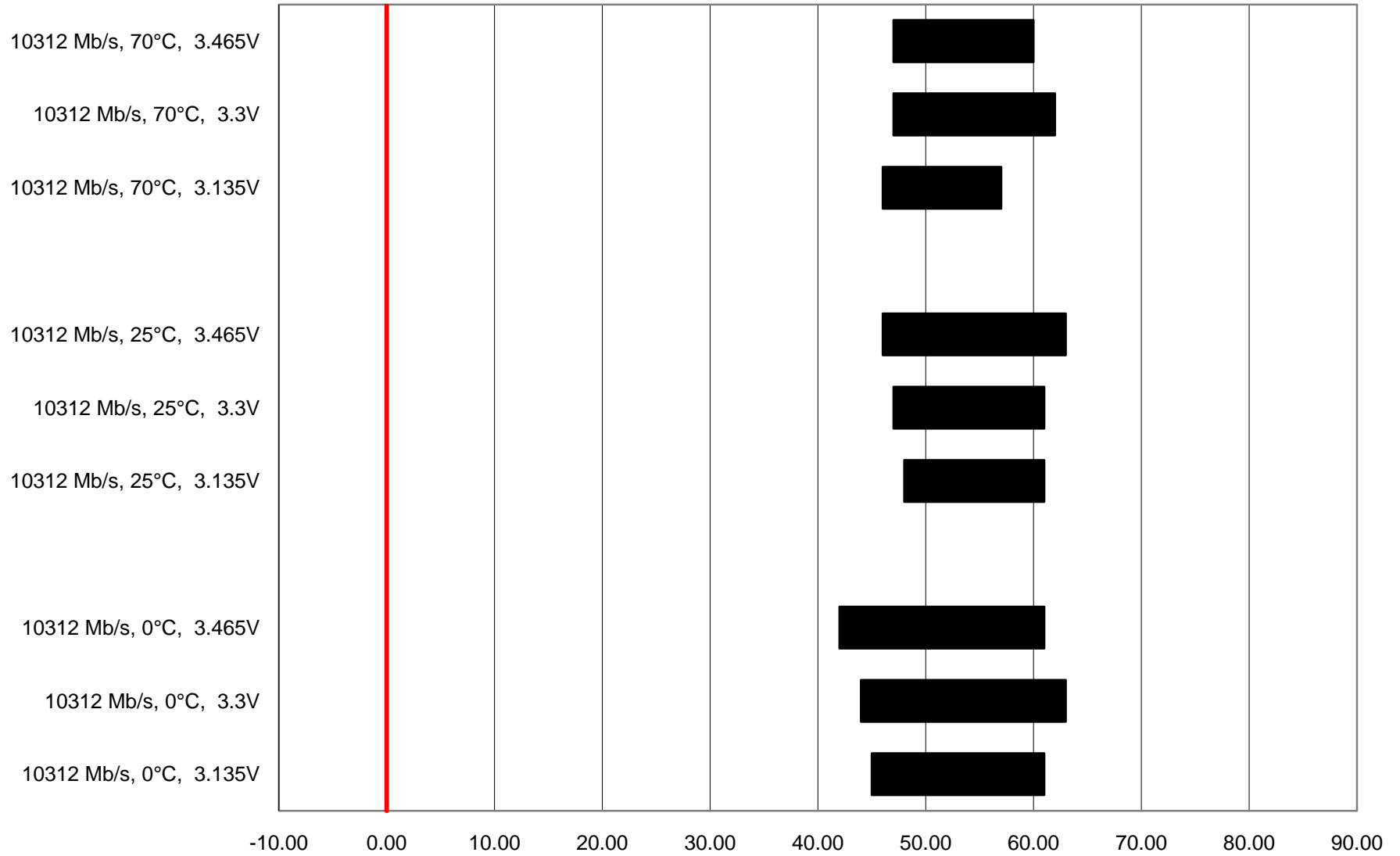
To verify compliance with specifications, 11cables were tested at 9corners (3.135V at 0°C , 3.135V at 25°C , 3.135V at 70°C , 3.3V at 0°C , 3.3V at 25°C , 3.3V at 70°C , 3.465V at 0°C , 3.465V at 25°C , 3.465V at 70°C), across one channel. The resulting test data is summarized in the following figures.

Figure 1.

The cable is operating at $f = 10.3125$ Gb/s, PRBS $2^{31} - 1$, 3.3V. The traces show typical Rx eyes, at 25°C.

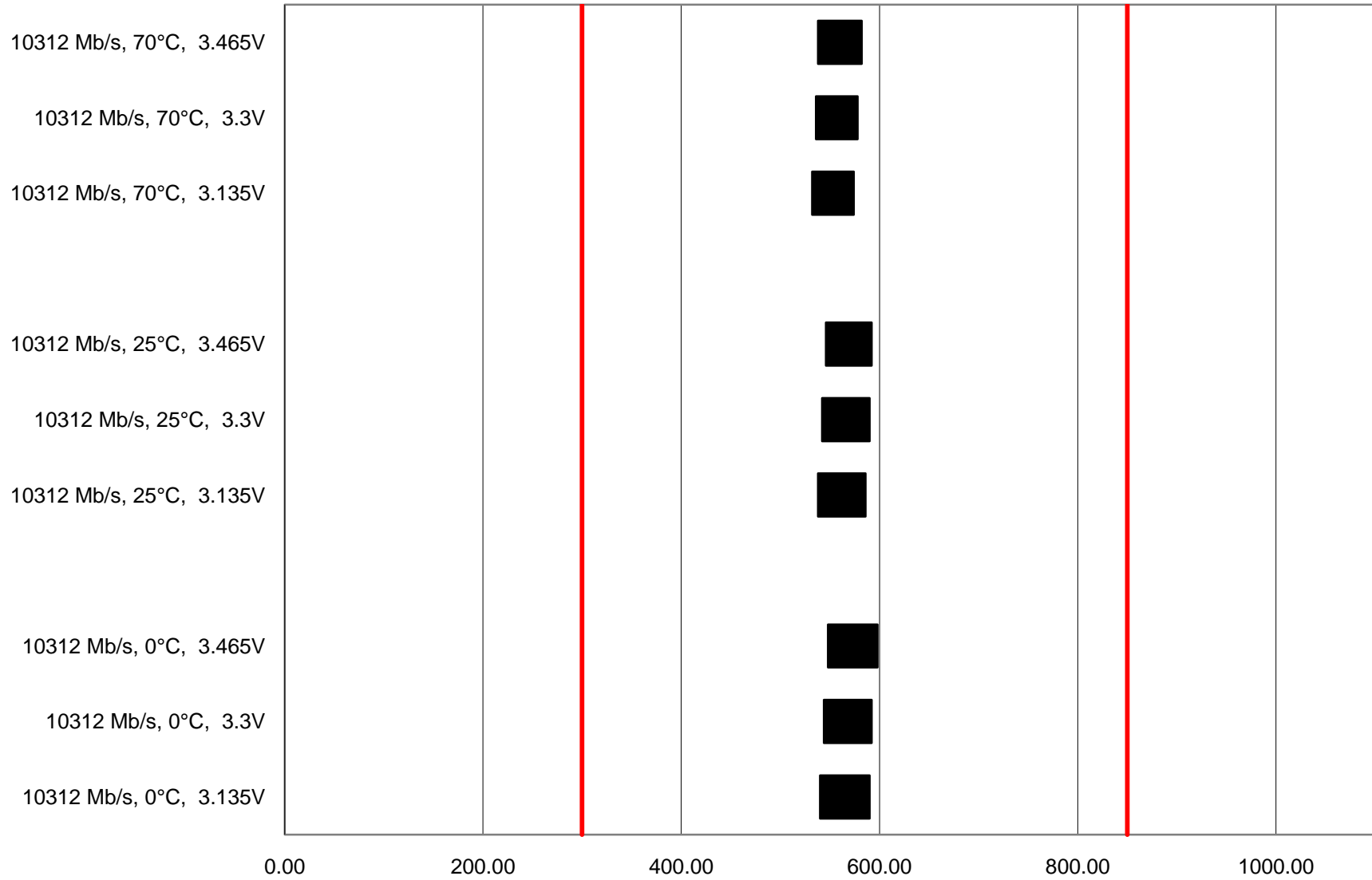


FCBG110SD1CXX Rx Mask Margin(%)



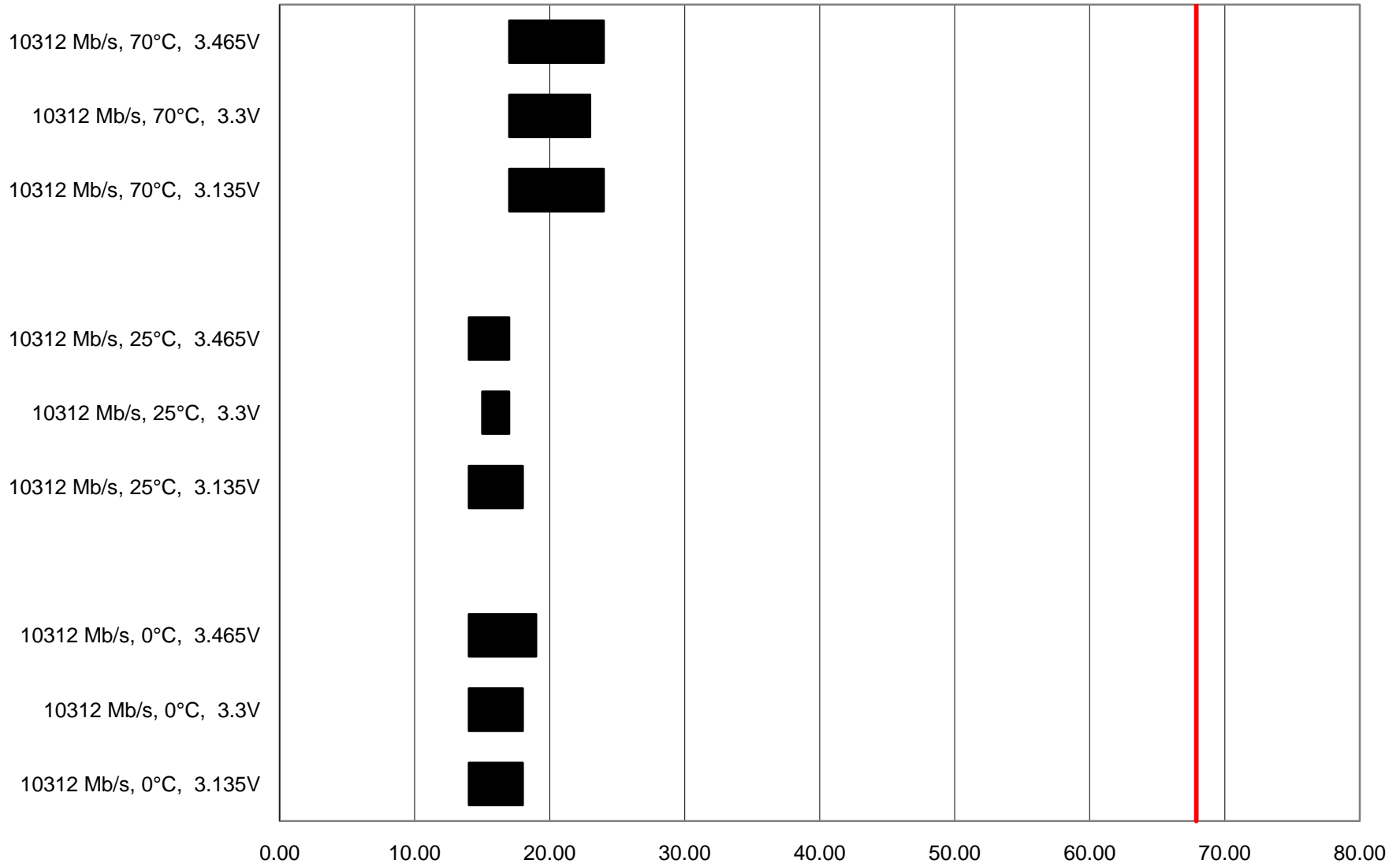
FCBG110SD1CXX

Rx Eye Differential Amplitude(mV)

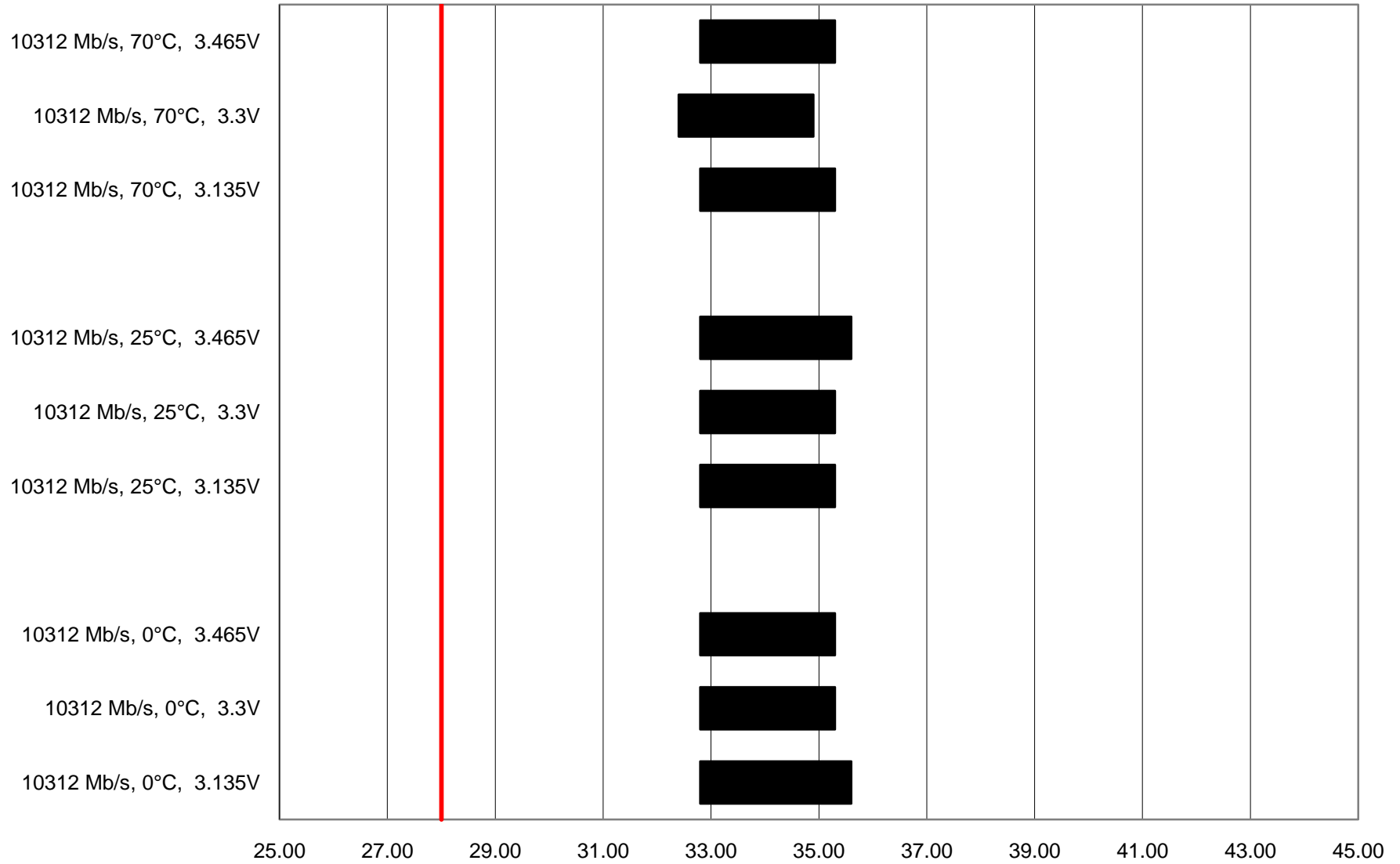


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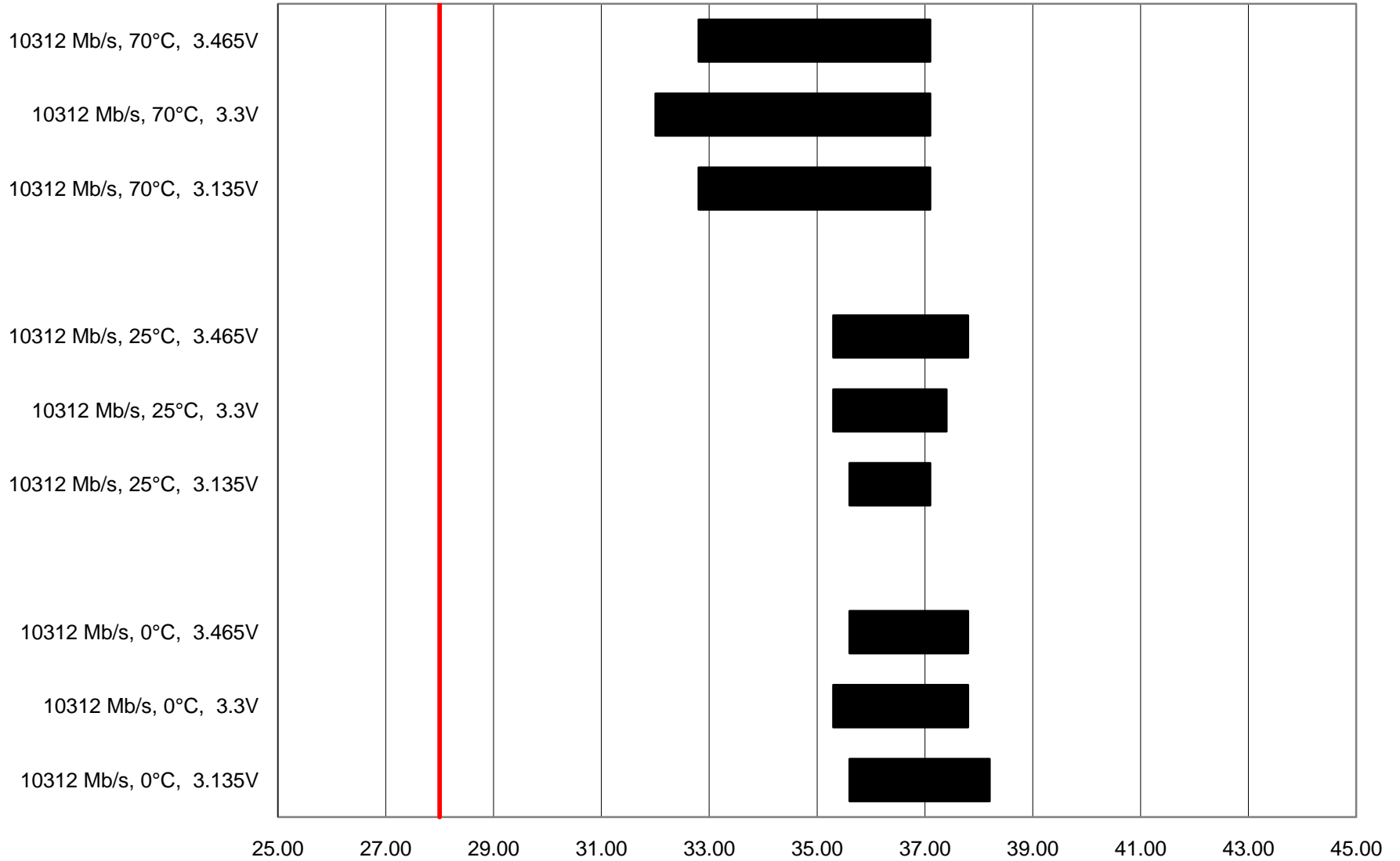
Rx Jitter pp(ps)



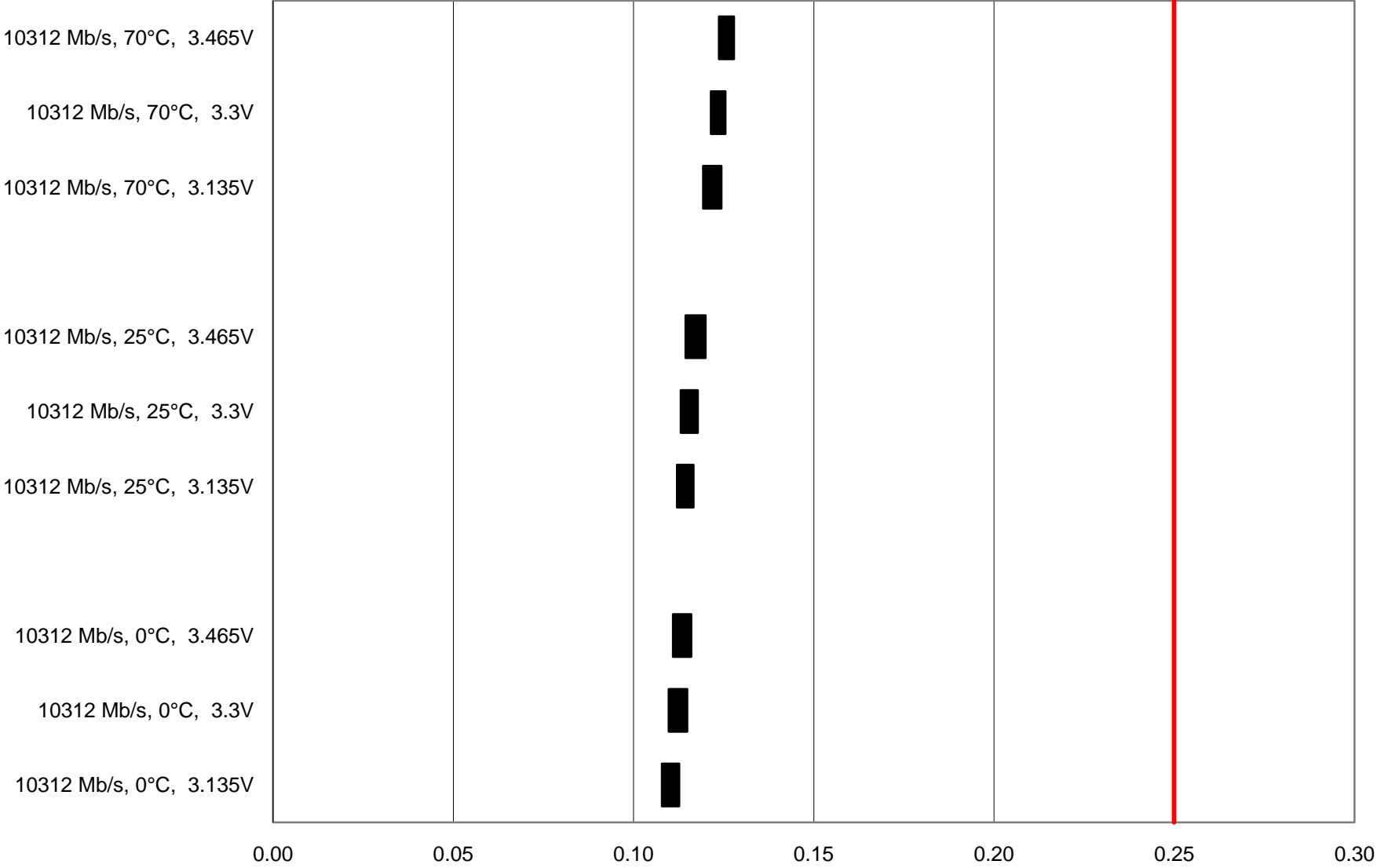
FCBG110SD1CXX Rx Rise Time(ps)



FCBG110SD1CXX Rx Fall Time(ps)



FCBG110SD1CXX Module supply current(A)(single end)



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Power consumption(W) (single end)

