

TDECQ Test Filter

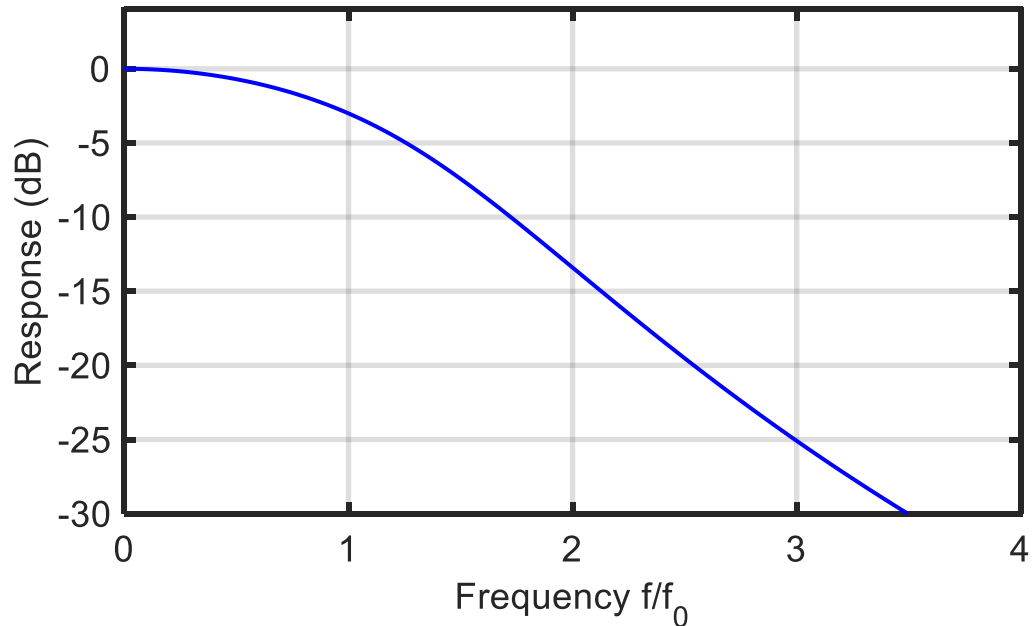
(in support of comment 51)

Ramana Murty

Broadcom Inc.

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force
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Bessel-Thomson Filter



4th order Bessel-Thomson filter with
3 dB bandwidth of f_0

Magnitude at $2.6 \cdot f_0$ -20.7 dB

Magnitude at $3 \cdot f_0$ -25.1 dB

50G Clauses 138 and 150

Roll off is defined at $3 \cdot f_0$ as a minimum of -24 dB.

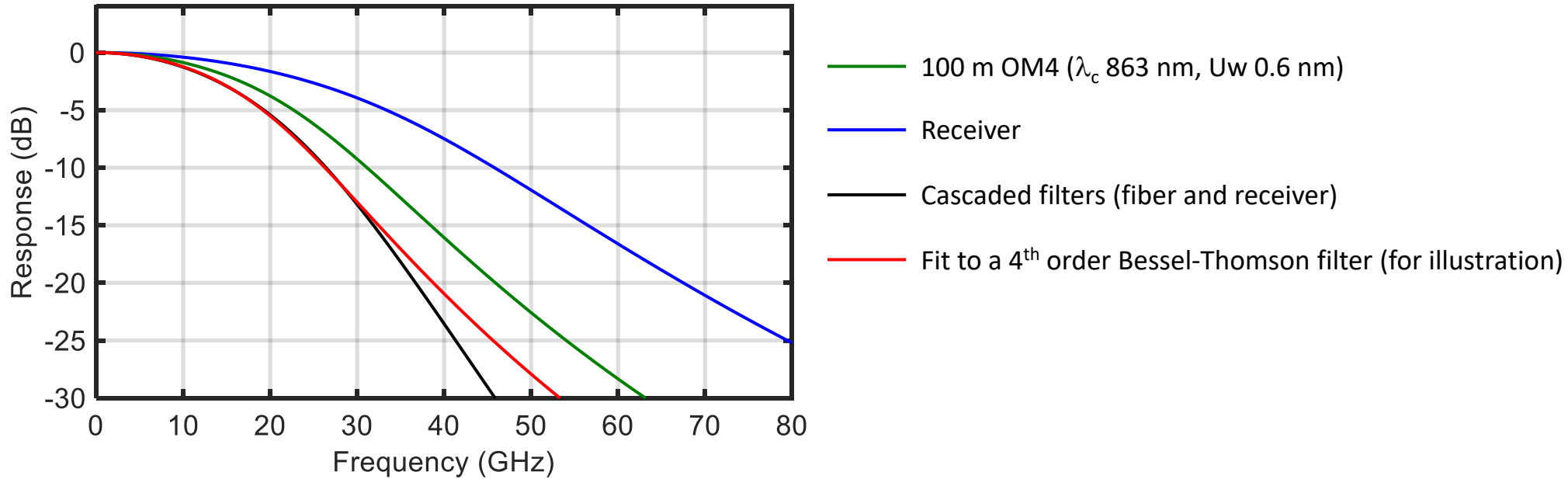
100G Clauses 140 and 151

Roll off is defined at $2.6 \cdot f_0$ as a minimum of -20 dB.

Comment #51

Roll off is defined at $2.6 \cdot f_0$, the value should be -20 dB.

Cascaded Filters



- Fiber and receiver are each modeled as a 4th order Bessel-Thomson filter
- The cascaded filter has a slightly faster roll off than a 4th order Bessel-Thomson filter