Microstrip linear phase low pass filter based on defected ground structures for partial response modulation - DTU Orbit (01/12/2018)

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We report a high performance linear phase low pass filter (LPF) designed for partial response (PR) modulations. For the implementation, we adopted microstrip technology and a variant of the standard stepped-impedance technique. Defected ground structures (DGS) are used for increasing the characteristic impedance of transmission lines. Experimental results prove that the proposed filter can successfully modulate a non-return-to-zero (NRZ) signal into a five levels PR one.

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