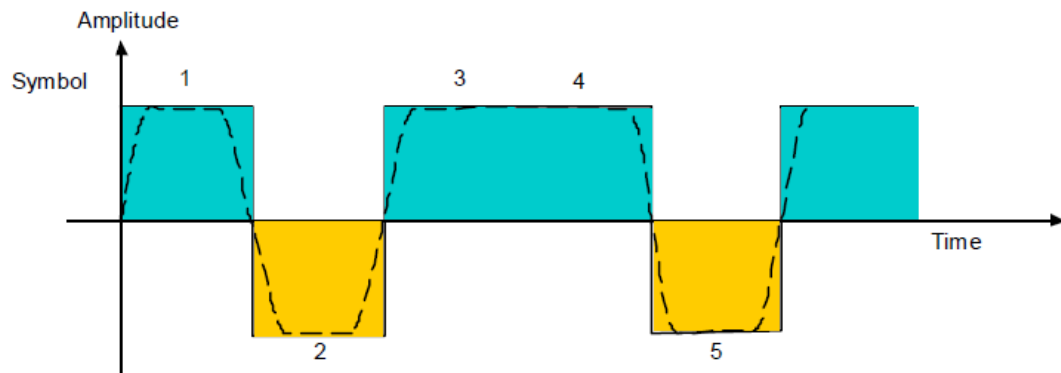
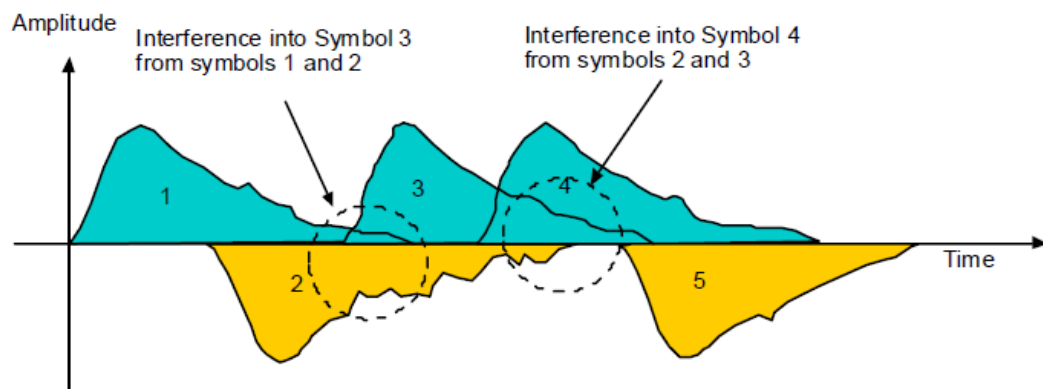


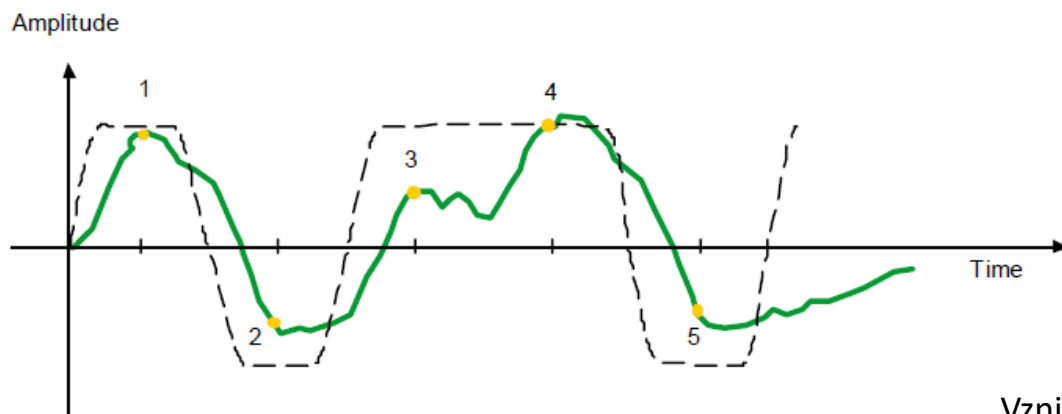
a)



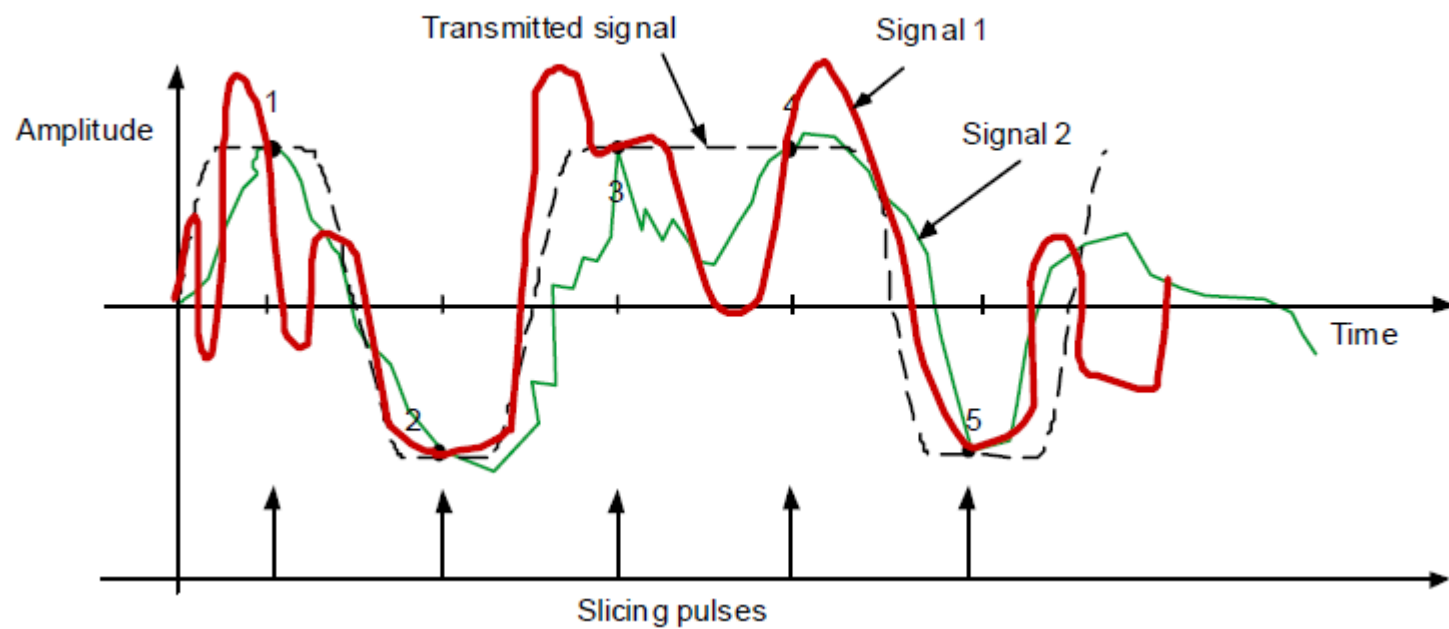
b)



c)

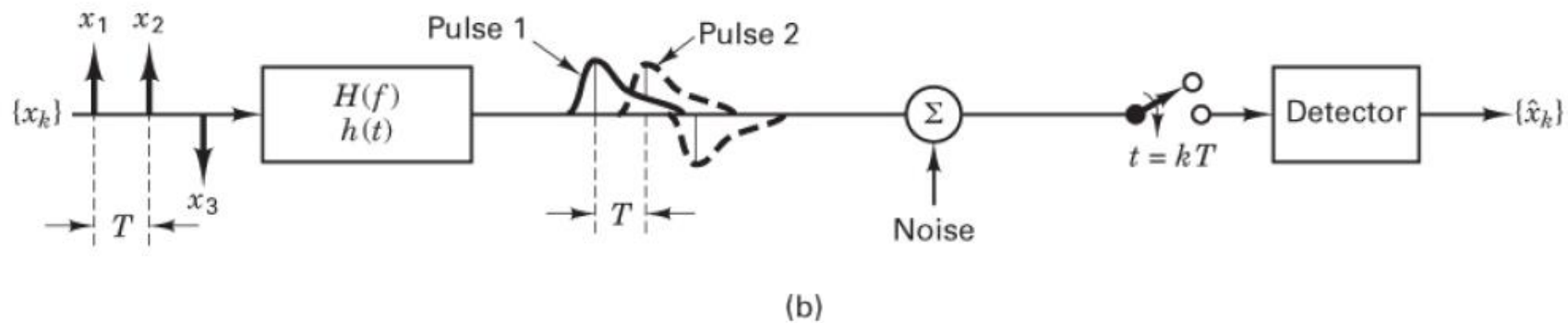
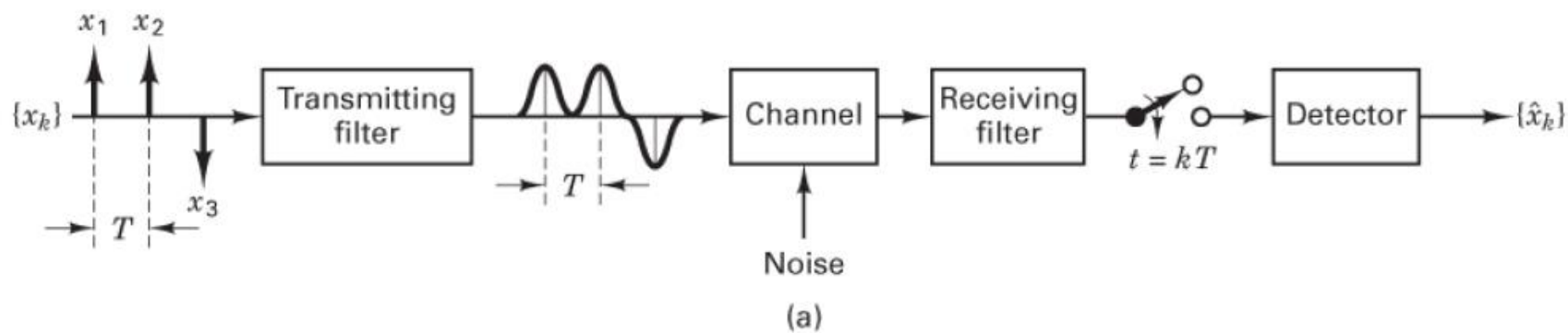


Vznik ISI
zdroj: complextoreal.com



Digitálne spracovanie signálu

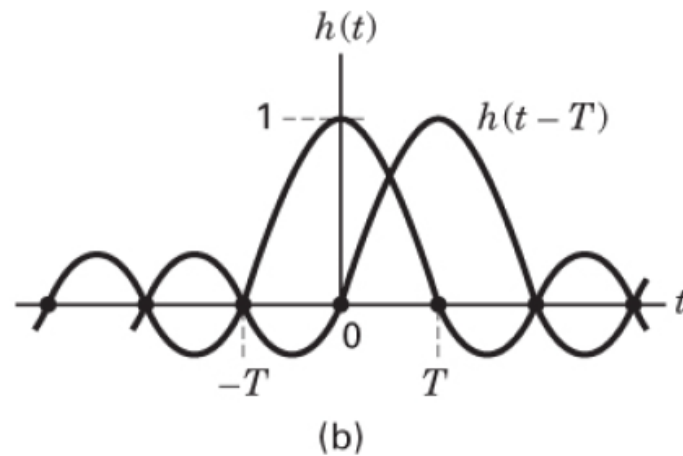
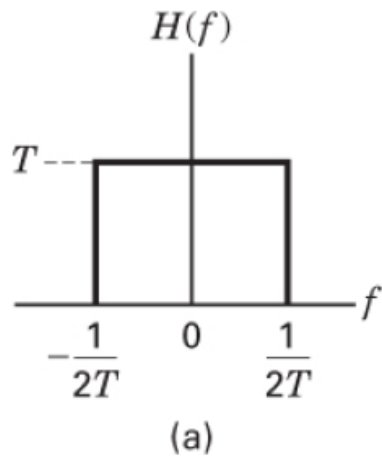
zdroj: complextoreal.com



a) Digitálny komunikačný systém v ZP

b) Bloková schéma

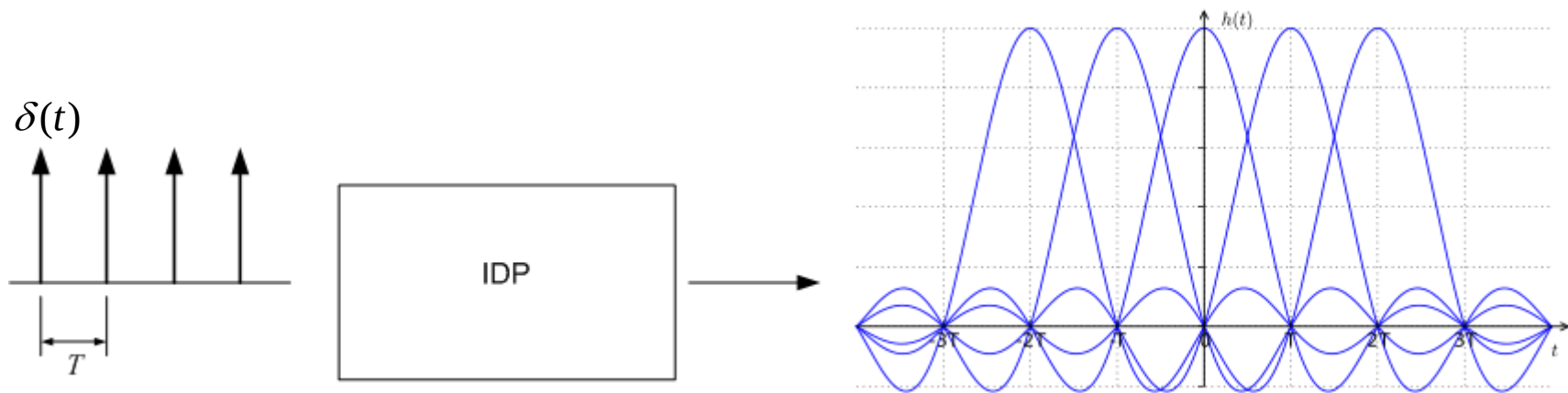
zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021



a) Nyquistov filter

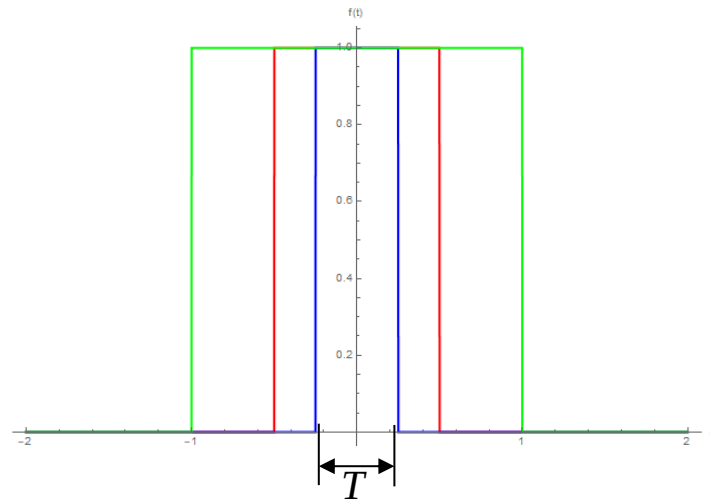
b) Výstup filtra ak na vstupe sú Dirac-ove pulzy

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021



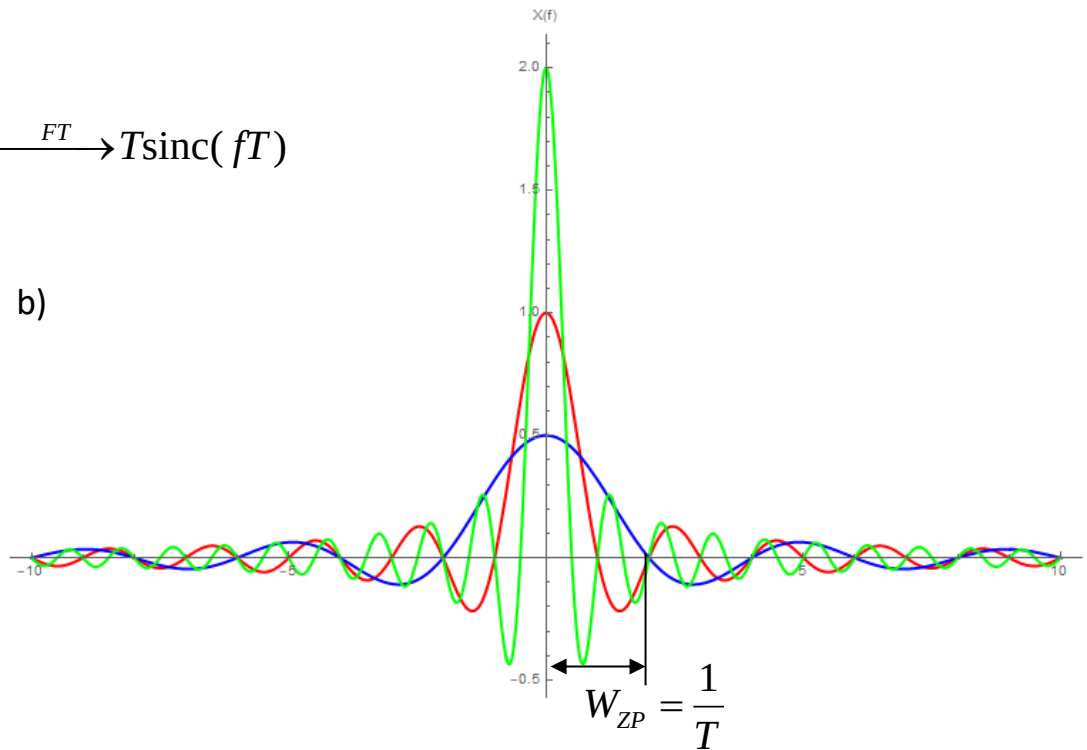
Prenos bez ISI

a)



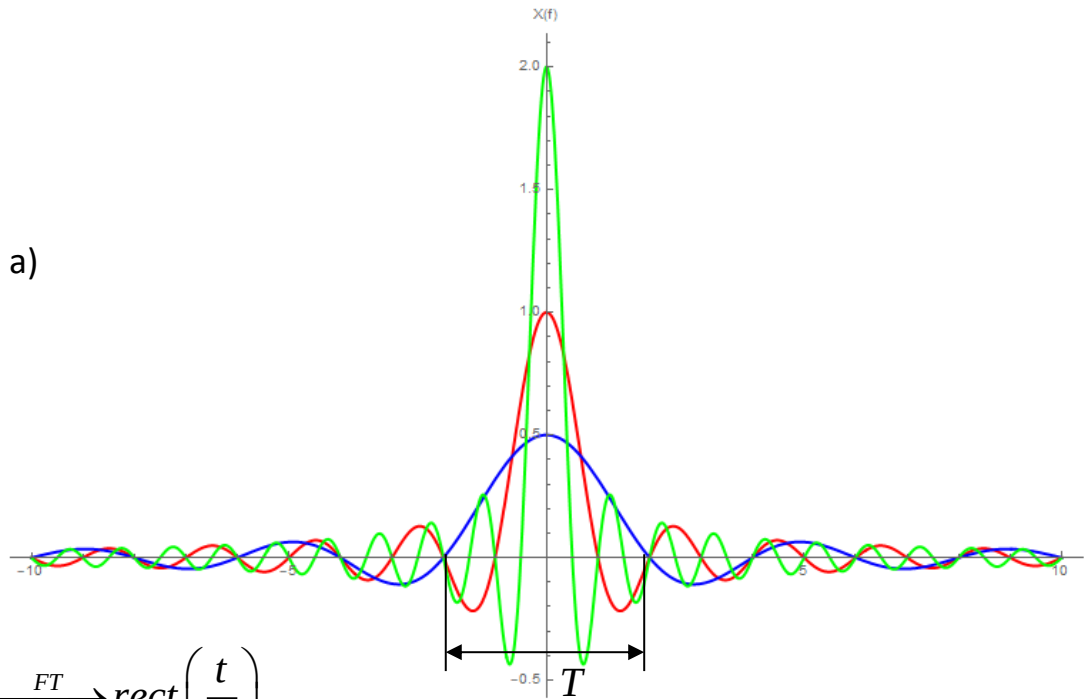
$$\text{rect}\left(\frac{t}{T}\right) \xrightarrow{FT} T \text{sinc}(fT)$$

b)



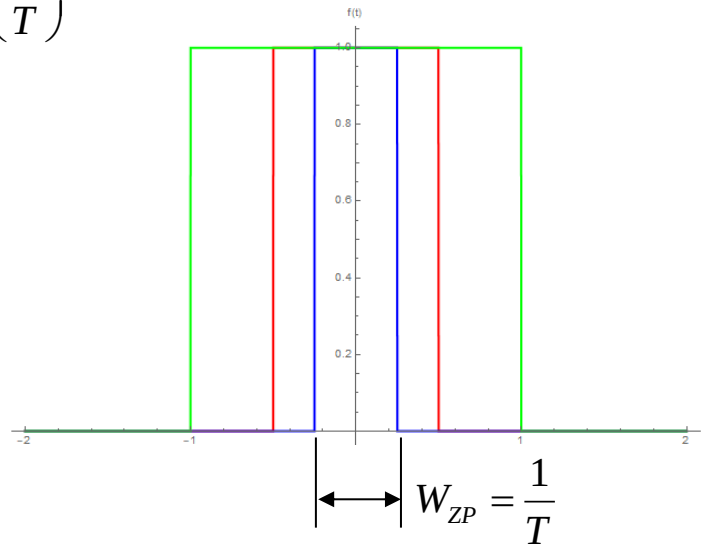
Použitie pravouhlých impulzov v časovej oblasti

a)

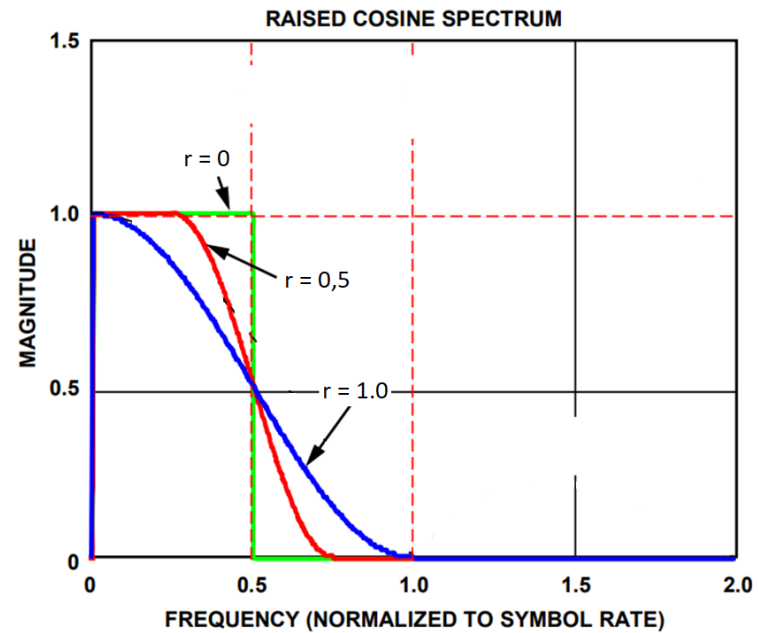
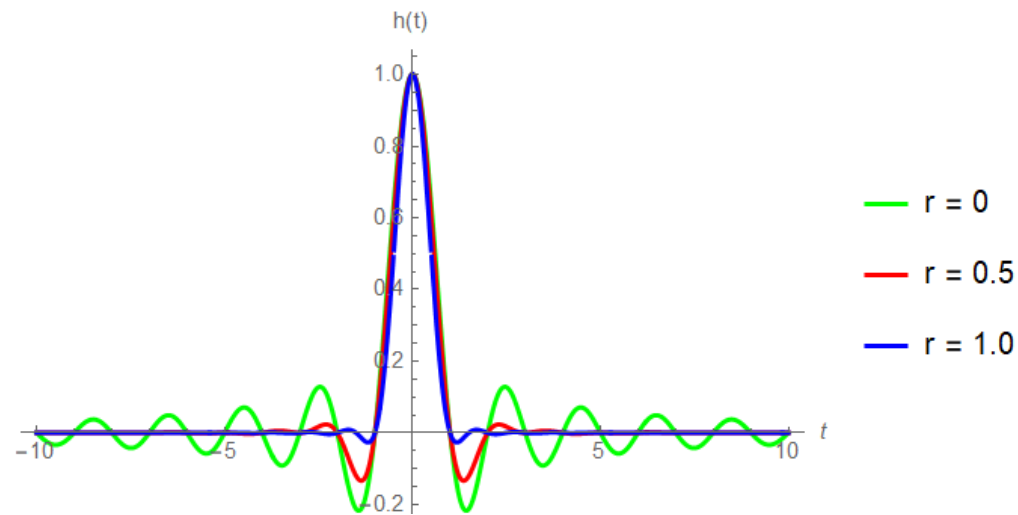


$$T \text{sinc}(fT) \xrightarrow{FT} \text{rect}\left(\frac{t}{T}\right)$$

b)

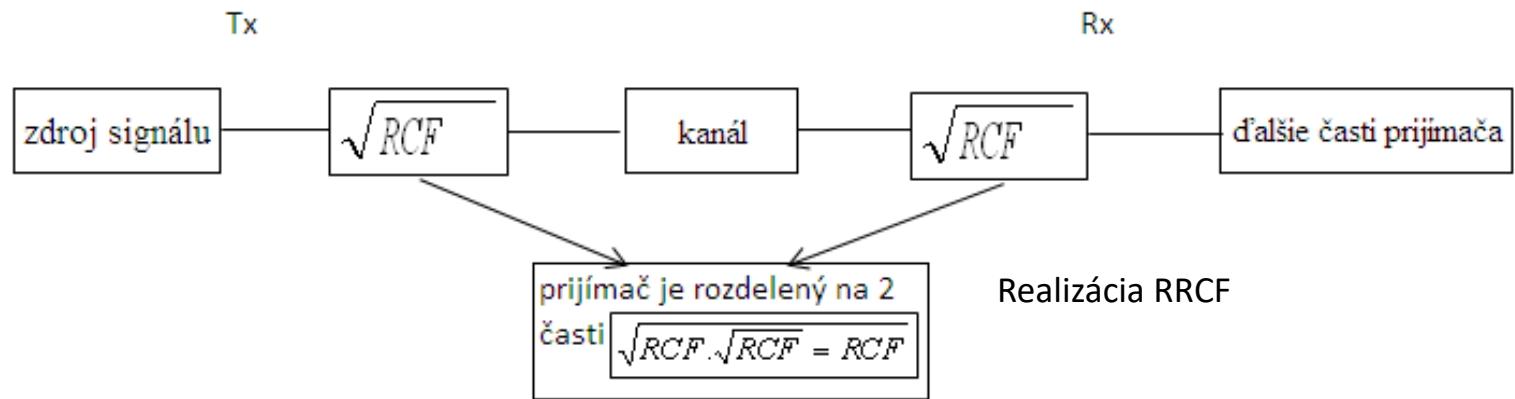


Použitie si impulzov v časovej oblasti

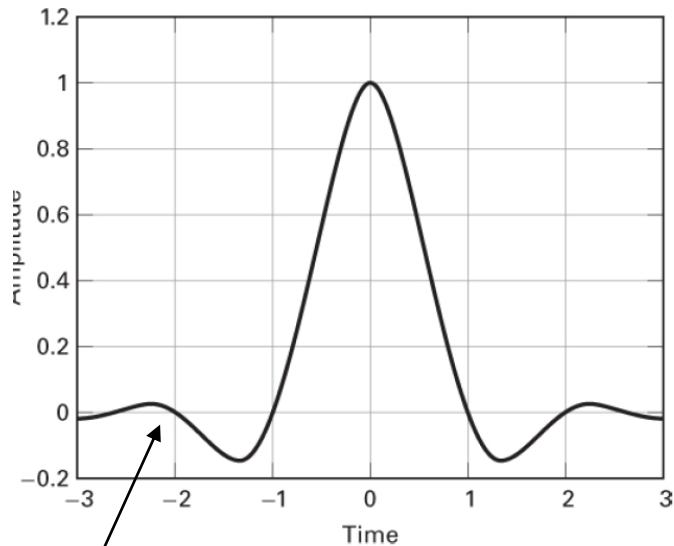


Prenosová funkcia RC filtra

zdroj: <https://www.analog.com/en/resources/app-notes/an-922.html>

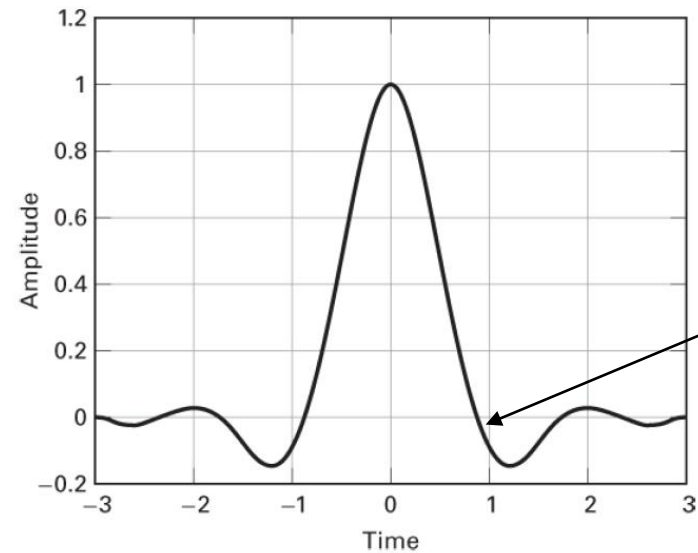


RC impulz



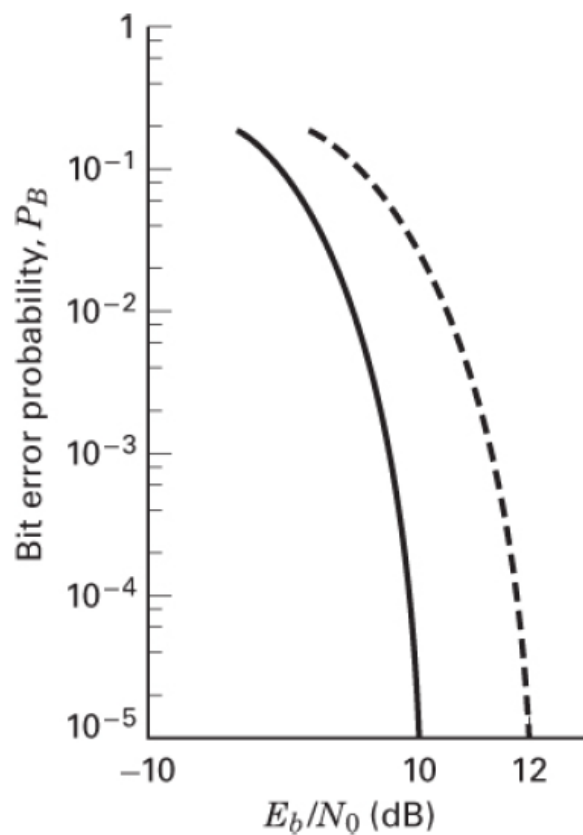
$ISI = 0$

RRC impulz

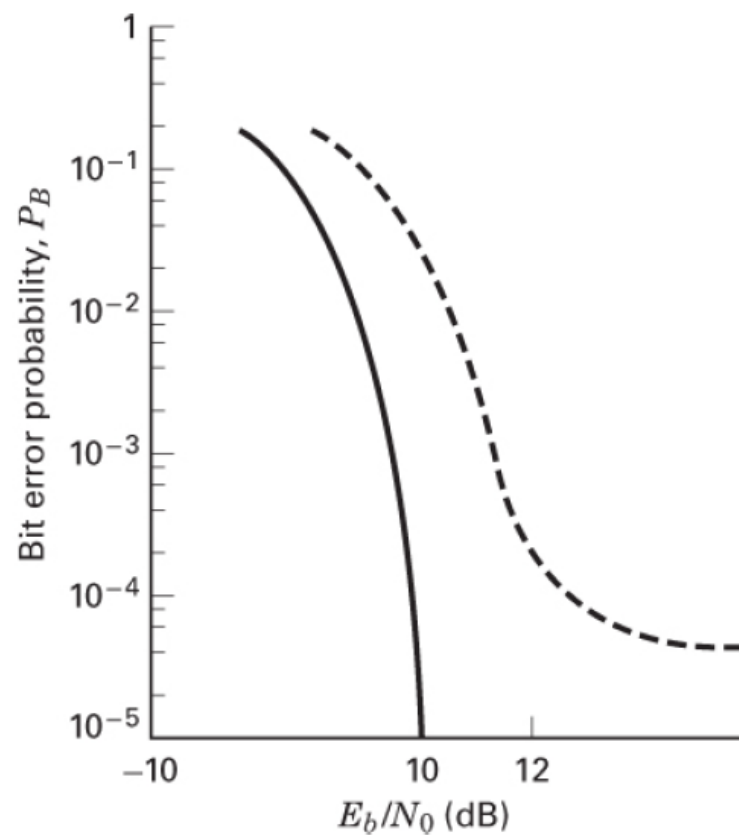


$ISI \neq 0$

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021



a)



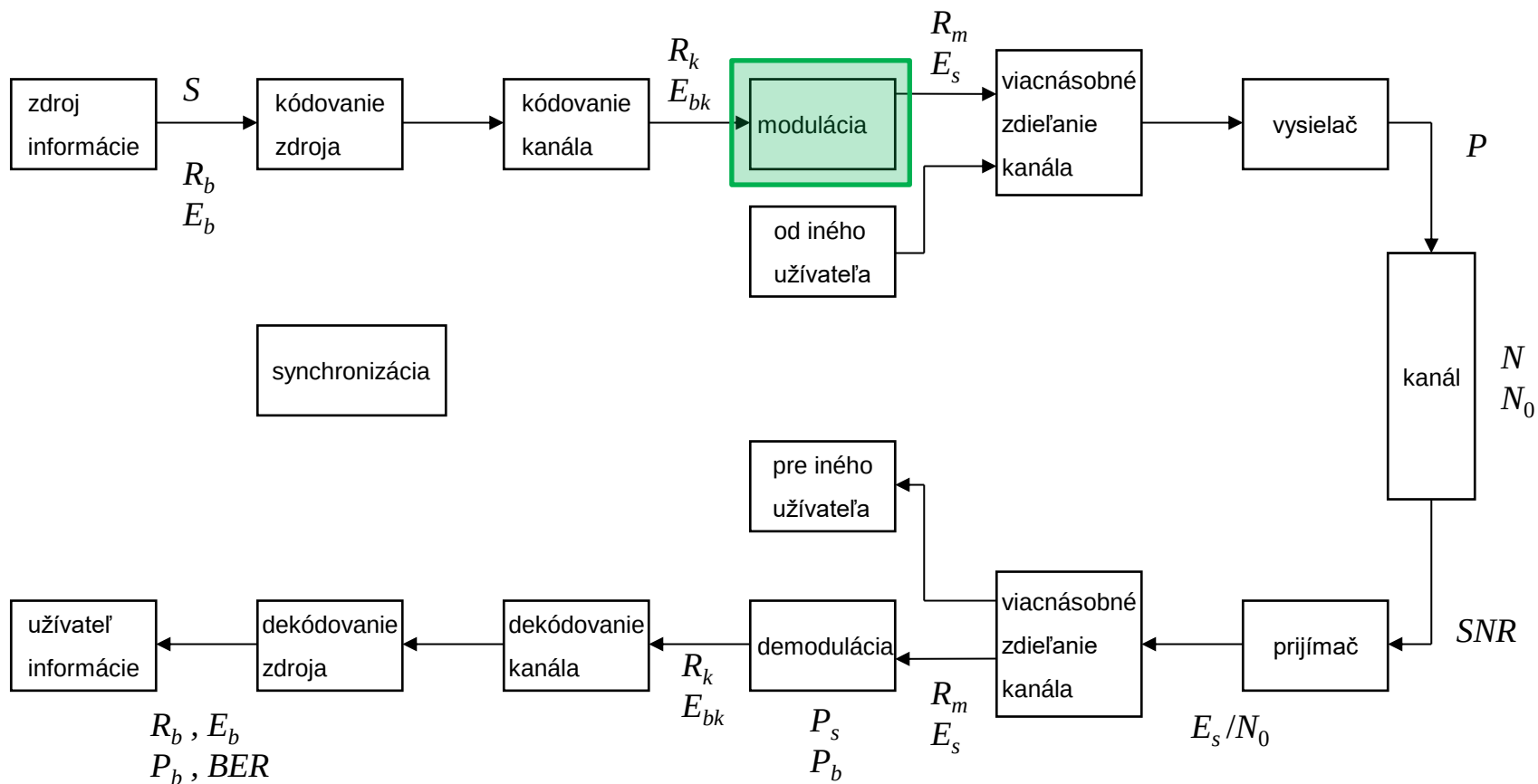
b)

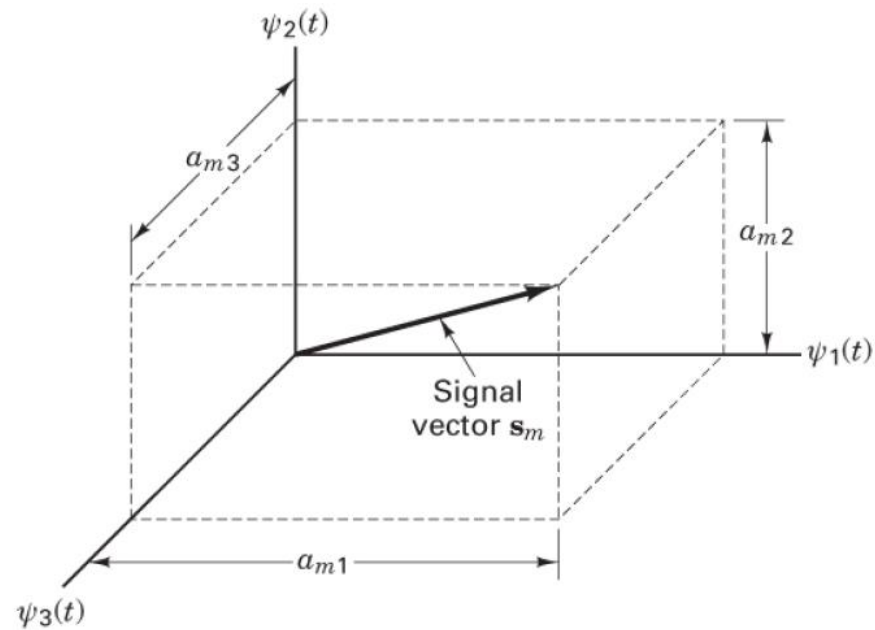
Degradácia výkonnosti systému spôsobená:

a) Poklesom SNR, b) skreslením signálu

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021

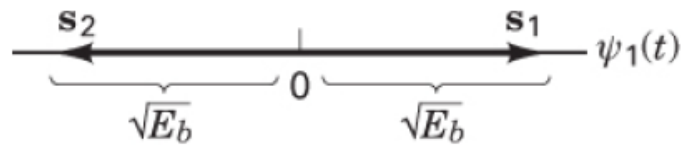
Digitálny prenosový systém:





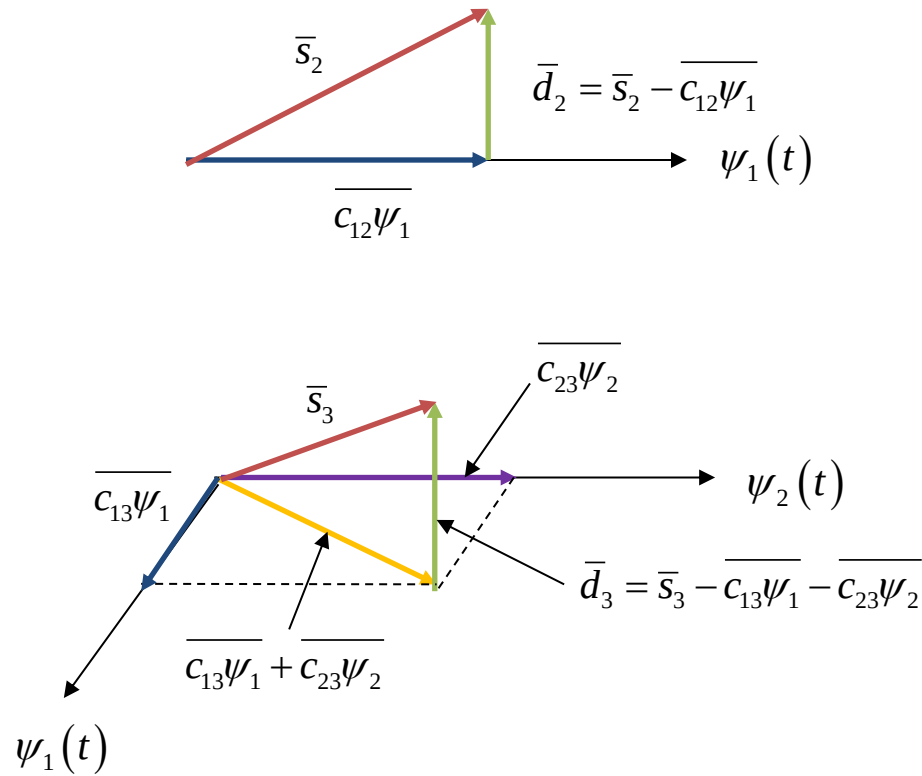
Grafické znázornenie signálu v 3D priestore

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021



Antipodálne signály

zdroj: B. Sklar, F. Harris.: Digital Communications, Pearson Education, Inc., 2021



Gramm-Schmidtova metóda