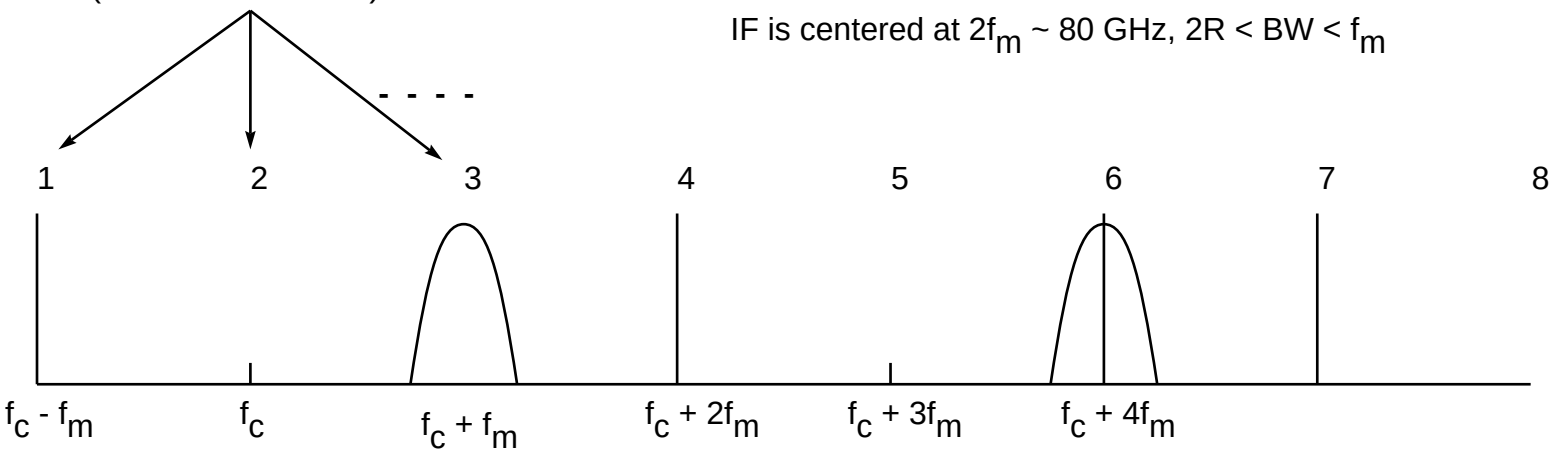
Reference line is spaced $2f_m$ below signal line.

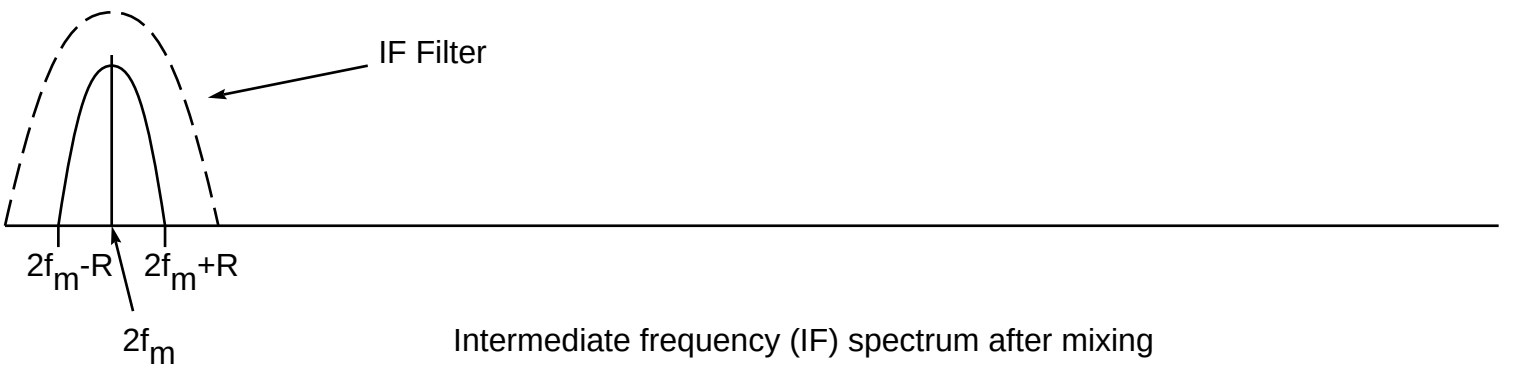
Intermediate frequency is $2f_m$

$R < f_m/2$. R ~ 10 GHz.

IF is centered at $2f_m$ ~ 80 GHz, $2R < BW < f_m$



Optical spectrum. f_c ~ 190 THz, f_m ~ 40 GHz, R ~ 10 Gb/s.



Intermediate frequency (IF) spectrum after mixing