

RF Design - IP3

Exercise 1: If the two input frequencies are 150 and 155 MHz, what are the frequencies of the third-order products? If these two frequencies represent the lower and upper frequencies of a channel, what is the channel bandwidth? Where would the third-order products fall relative to the adjacent channel?

Exercise 2: An amplifier has an OIP3 of 30dBm. If it is required that the adjacent channel power be 30dB below the in-channel power, what is the maximum output power we should try to get from this amplifier?