

4.2 BASIC CONCEPTS

In SMPTE type IM measurements two sinusoids of widely differing frequencies, say 60Hz and 7KHz, are summed in a 4:1 voltage ratio respectively, to generate the test signal.

When this signal is applied to a non-linear device the low frequency will modulate the high frequency generating in effect modulation sidebands about the high frequency in a similar fashion as in AM modulated radio wave (see fig. 4-1). This produces frequencies of 6940Hz and 7060Hz (60Hz sidebands) centered about the 7KHz (carrier).

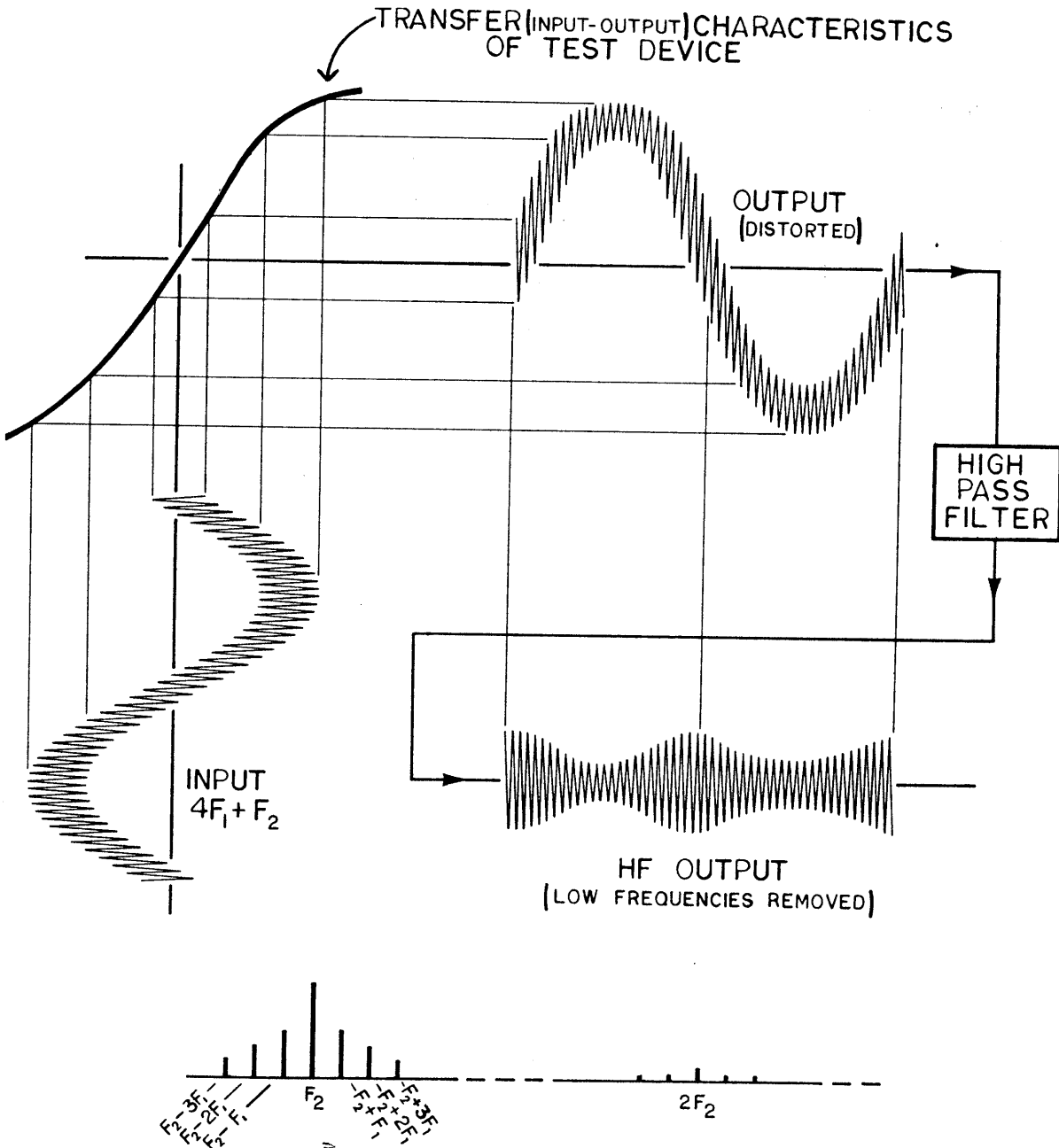


FIG. 4 - 1 DISTORTION GENERATION