Subject: Re: sensitivity: conversion of units
Posted by GM on Wed, 08 Jun 2005 18:31:18 GMT
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Greets!I've seen various values used for half space pressure, from 112 -112.2 dB/m, though 112 seems to be the most common. FWIW, I calc'd it at 112.018, so rounding it off to 112 and 1 % eff..... dBv = ~112+10*(log10(0.01)) = ~92 dB/~2.828V/mSince 1 W = E^2/R = ~2.828^2/8 = 1, then dBa = ~92 dB/W/m for 8 ohm nominal loads. To convert other nominal resistances (R) to dBa, add 10*log10(R/8) to the dBv, so if the above is a nominal 4 or 16 ohms, then dBa = ~89 or 95 dB/W/m.GM