Errata Sheet for Volume 1 of Practical RF Circuit Design for Modern Wireless Systems

P 18. The two Z_L formulas in the center of the page should be shifted to the right to line the "=" signs with the formulas above them (where $Z_0 = 50\Omega$ and $Z_0 = 75\Omega$).
P 21, Figure 2.5 The equation on the right side should be $Z = (R \pm jX)\Omega$. Change X_1 to X.
P 49, Figure 2.21 In the "End view" of "Stripline," the center conductor should be symmetrically spaced between the top and bottom sides.
P 54, Figure 2.26 The wires from the source and load should be extended to the center of the coaxial transmission line.
P 91, Figure 3.6. Some of the curved lines should be dashed:

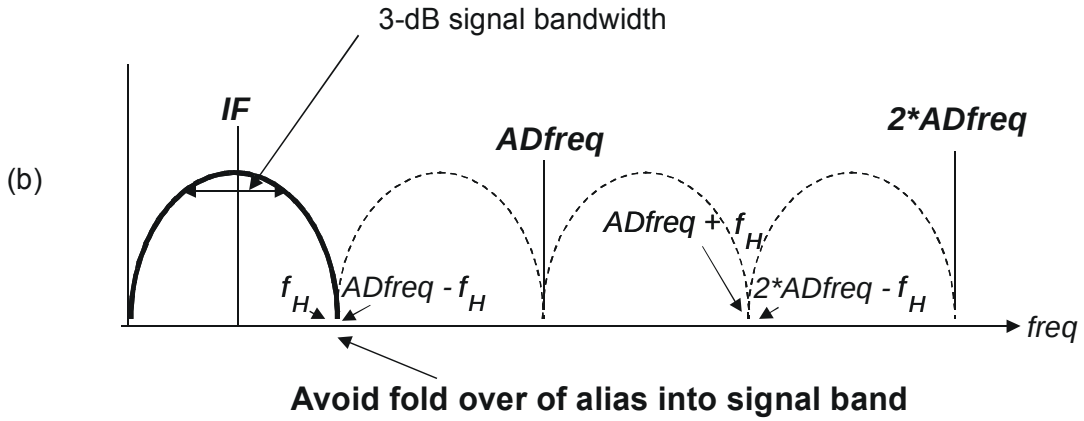
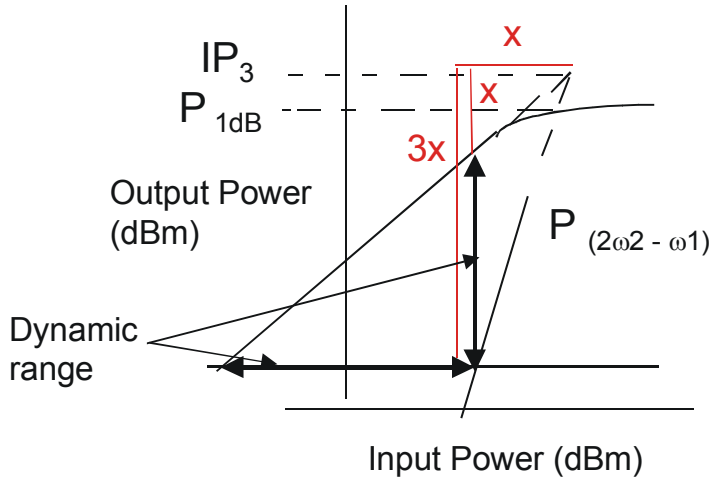


Figure 3.6

P 107, Line 2: Delete comma "bordering,"
Fifth line from bottom: Delete 'in' after "nonlinear output"
P 110, Figure 3.18 Arrows from label "dynamic range" need changing; bold horizontal line needs shortening:



P 111, Figure 3.19 SFDR1 bold; line above SFDR12 not bold:

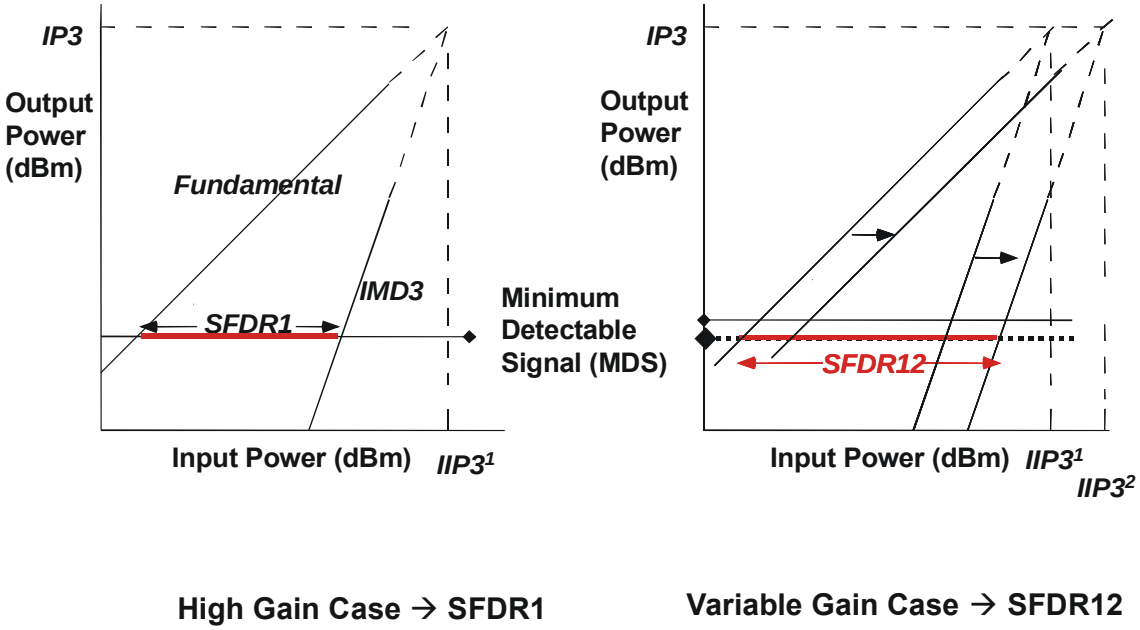


Figure 3.19

P 134, Figure 3.33 In caption, change “saw” to “SAW.”
P 142, Figure 3.37(b) Delete two bold vertical lines:

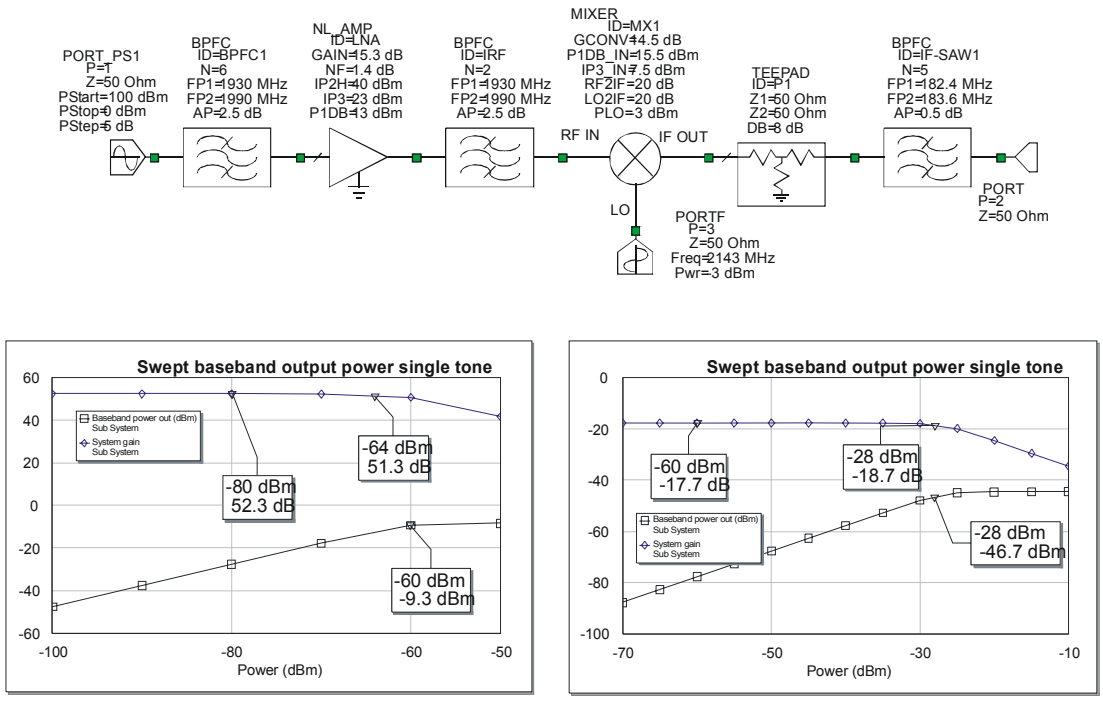


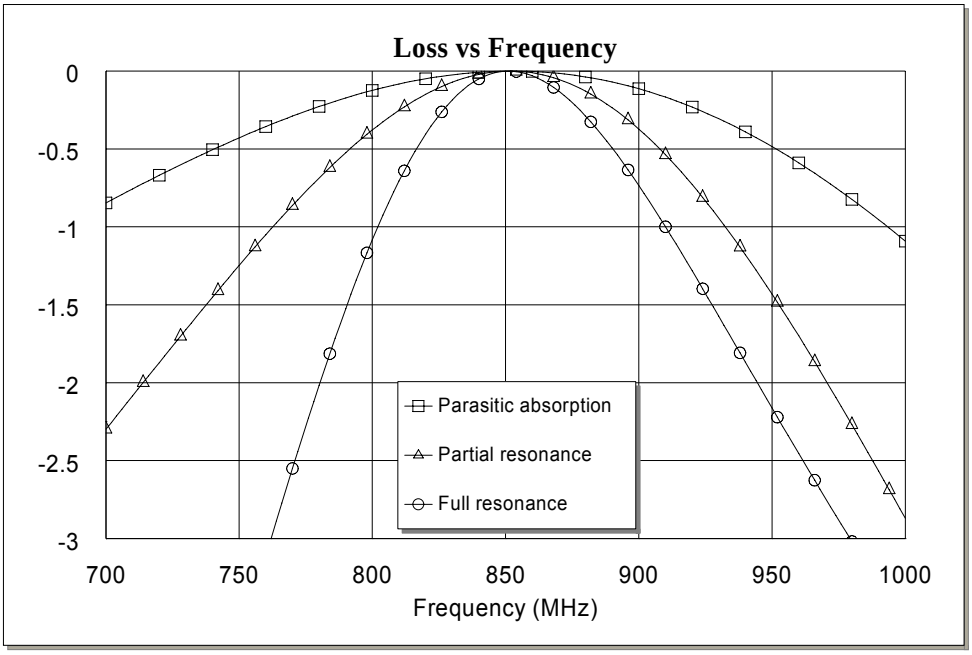
Figure 3.37. System diagram and cascade analysis of the six-stage radio described in Table 1. a) in high gain mode, when the last stage has +35dB gain b) in low gain mode, when the last stage has -35dB gain

P 149. Center of text: Plate 1 and all other Plates are located at the end of Chapter 4.
P 150. Fourth paragraph: z^* should be z^* in two places.
P 155, Figure 4.1 The circumference of the Smith chart should be moved 1/16” upward.
P 159, Figure 4.5 In the Smith chart, at the end of the arrow, place a dot and label it as, y_T.
P 161, Table 4.4 Replace X with x in two places, as shown in Note.

P 165, Figure 4.6 This is the wrong figure. Look at the page proofs for correct figure and caption.
P 166. In fourth paragraph change Plate 18 (a) to (corrected) Figure 4.6 (b).
P 167. In third paragraph change Plate 18 (b) to (corrected) Figure 4.6 (b).
P 169. In first paragraph, Change "The 3-dB" to "A 3-dB."
Figure 4.8 Change all X to x and all R to r.
P 174. Figure 4.11 Mark two figures with (a) and (b).
In the equation, change Z_T to Z_L.
P 187. Figure 4.17 Poor quality photo
P 188. Figure 4.18 Extend the wire from input capacitor's left side to the output contact of the switch.
P 200. Equation (4.27) In the top half of the matrix, the right-side fraction should be moved to the right
Figure 4.21 Change S' to S_{AB}.
P 201. In first paragraph, fourth line: Remove the comma that is placed between s_{A21} and s_{B21}
P 206. Figure 4.29 Change absolute signs (I) to matrix brackets ([ ]) in all four equations.
P 208. Equations (4.34) and (4.35): Remove four L-shaped symbols placed inside brackets.
P 215, Equation (4.40), should look like this:

$$S^{mm} = \frac{1}{2}\left[\begin{array}{cc:cc} (s_{11}-s_{12}-s_{21}+s_{22}) & (s_{13}-s_{14}-s_{23}+s_{24}) & (s_{11}+s_{12}-s_{21}-s_{22}) & (s_{13}+s_{14}-s_{23}-s_{24}) \\ (s_{31}-s_{32}-s_{41}+s_{42}) & (s_{33}-s_{34}-s_{43}+s_{44}) & (s_{31}+s_{32}-s_{41}-s_{42}) & (s_{33}+s_{34}-s_{43}-s_{44}) \\ \hdashline (s_{11}-s_{12}+s_{21}-s_{22}) & (s_{13}-s_{14}+s_{23}-s_{24}) & (s_{11}+s_{12}+s_{21}+s_{22}) & (s_{13}+s_{14}+s_{23}+s_{24}) \\ (s_{31}-s_{32}+s_{41}-s_{42}) & (s_{33}-s_{34}+s_{43}-s_{44}) & (s_{31}+s_{32}+s_{41}+s_{42}) & (s_{33}+s_{34}+s_{43}+s_{44}) \end{array}\right]$$

P 220. Should have a statement about the Plates 1-23 shown in the next 12 pages.
Plate 2. Modify the $\angle\Gamma = 83°$ label to look like what you have in Plate 1 (combine $\angle$ symbol and Γ).
The circumference of the Smith chart (red dashed circle) is missing.
Plate 3. Add an "F" label next to the ∞ symbol.
Plate 7. Inside the box, change $z_L = 0.5 - j0.5$ to $z_1 = 0.5 - j0.5$.
Plate 8. Add minus sign to jb_{L4}, to read $-jb_{L4}$.
Plate 9 Add minus sign to jb_{L4}, to read $-jb_{L4}$.
Add the missing two short red arcs to mark the paths of jx_{L1} and $-jx_{C3}$, as shown in Plate 8
Plate 10 is the wrong chart--we talked about this a lot. Perhaps this would be a good time to show the full-page commercial two-color chart (we sent you the file of the red-black artwork). What is shown currently in Plate 10 is **not** the commercial chart.
Plate 12(c) Add the missing inductor, like in (a), not resistor. Chart (b) is missing a red dot at the center [where f = ∞] and chart (d) is missing one on its left side [where $f=f_R$].
Plate 19. Add a heavy black horizontal diagonal line through its center,
instead of the light red one, for Q = 0.
Plate 21(a). The horizontal red diagonal line of the Smith chart is missing. See
chart (b).
P 230. Figure 5.6 Change "CS" to "C5"
P 236. Figure 5.15 Remove to through-connections inside the "Matching network" box.
P 242. Figure 5.20 On the Smith chart:
Change T_I to T_1
Change "k=" to "x=" in two places
Change "End at 5Ω" to "End at 50Ω"
P 249. Figure 5.26 Change "CM" to "C_M" and "L_{FINAL}" to "L_{MR}"
P 251. Figure 5.28 I cannot explain how this happened, but this is the wrong figure. Apparently, I submitted a .psd and .ppt file which are different. (.psd right, .ppt wrong). The right figure, shown in the original hardcopy, looks like this:



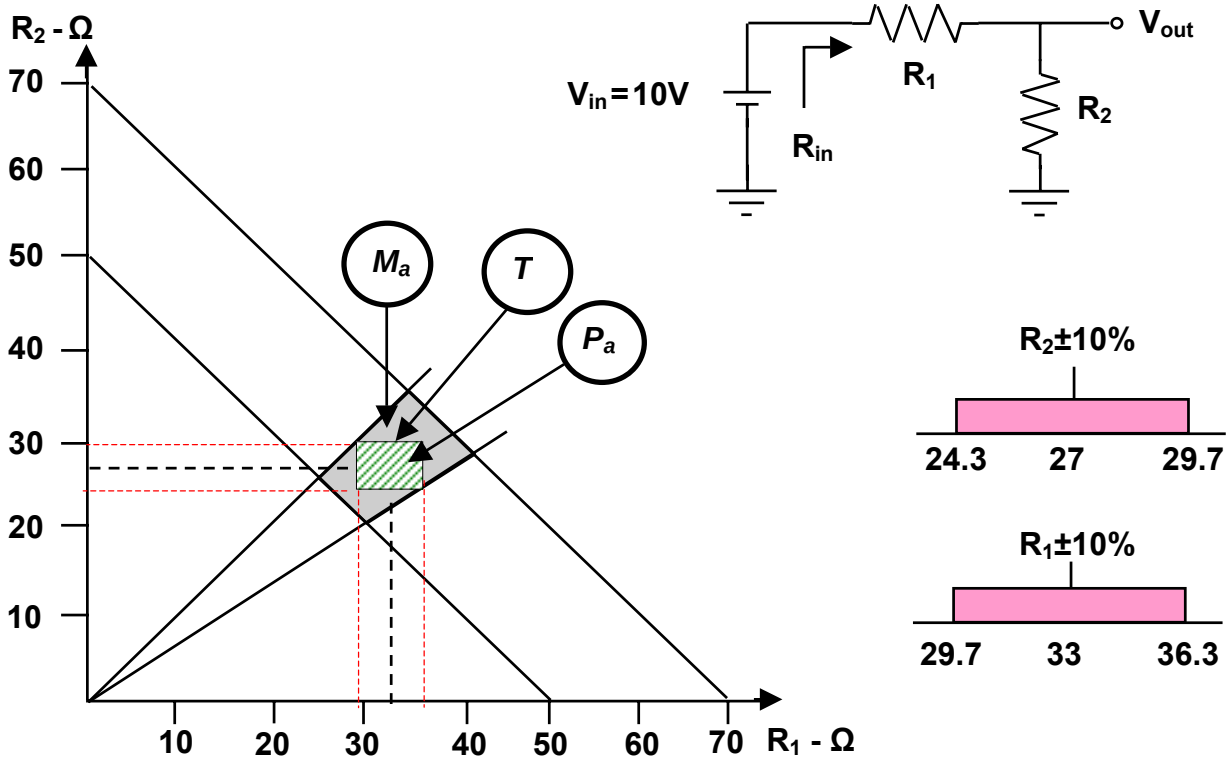
The wrong figure was used in the page proofs, but I focused so much on correcting labels that "I did not see the forest through the trees."

P 252. Figure 5.29(a) On the top half of the chart, change "3.0" to "-3.0"

On the bottom half, change "3.0" to "-0.3" and add below additional label for the susceptance circle: 3 (see Figure 5.30).

P 254. Figure 5.30 Top half of the chart, change "3.0" to "-3.0"

P 307. Figure 6.19 Figure should look like this (black and white only):



P 358. Figure 7.15 Chart gridlines are very light

P 370. Figure 7.27 Of the two "Incorrect" labels, the one on the right side should be "Correct."

P 371. Figure 7.29(b) Chart gridlines are very light

P 374. eq(7.20): H^2*(d/2)^2 should be H^2+(d/2)
P 382. Second paragraph, fourth line, chane “izs” to “is”
P 386. Figure 7.38 Two connecting lines are missing in the left-side branch of the circuit schematic (see right side branch).
P 393. Figure 7.43(b) Change $v1^i$ and $v2^i$ to v_1’ and v_2’.
P 424. Equation (8.1) In the second line, spaces should be added before and after the word “for” to emphasize that there are two statement on that line.
P 430. Line 7-8, change “frequen cydomain” to “frequency domain.”
P 442. Figure 8.20(b) Lighten the single heavy vertical gridline in the upper left-side plot
P 469. Figure 8.48 In the caption. Mention that the figure is continued on the next page.

In Figure 8.50 on Page 474, change:

P 474. $\mathbf{C_A = \frac{D}{C_1}}$ **to** $\mathbf{C_A = \frac{D}{C_2}}$

$\mathbf{C_B = \frac{D}{C_2}}$ **to** $\mathbf{C_B = \frac{D}{C_1}}$

Figure 7,27 shows two "incorrect" forms instead of one "incorrect" and one "correct."

p 524: In the Noise Factor formula the last part, "[T_0 = 293K]" states the value of T_0. It is not part of the equation.
p 525: Under the heading, “Ideal lumped inductance and capacitance…” the correct forms are:

$$\mathbf{L_{nh} = \frac{0.159 X_L}{f_{GHz}} = \frac{0.159}{f_{GHz} B_L}}$$

$$\mathbf{C_{pF} = \frac{159}{f_{GHz} X_C} = \frac{159 B_C}{f_{GHz}}}$$

Note: The quantities 0.159 and 159 need to be interchanged from their printed values.