Technical Errors

p. 11-88 (first scratch on the new car)
add the 2 subscript to $v_C(t)$:

$$v_{C2}(t) = \frac{NV_s}{R_1 C_2}\left(\frac{e^{-at} - e^{-bt}}{b-a}\right)u(t)$$

p. 12-116 (provided by Nicholas Timkovich)
in Table 12.3, for entry 29, replace the Time Function with with

$$x(t) = -x\left(t \pm \frac{T}{2}\right) = -x(-t)$$

p. 13-98
in Table 13.6, for the high frequency, low loss, low distortion column heading, change $G >> \omega C$ *to* $G << \omega C$
p. 15-135
change (15.154) to

$$X_L \approx \frac{\omega\left(M^2 - L_1 L_2\right)}{L_1} = \omega L_2\left(k^2 - 1\right) \quad \text{if} \left(\frac{R_L + R_2}{X_L + \omega L_2}\right)^2 << 1$$

p. 19-19
in the first equation on this page change 0.25 μA *to* 25 μA
p. 19-48
change the phrase after (19.136) from "is referred to as Lenz's law." *to* "is referred to as Faraday's law." Also change the phrase "Lenz's law will be further studied" *to* "Faraday's law will be further studied" (see the discussion in Helpful Notes)
p. 22-11
change "between objects of different" *to* "between unshielded objects of different"
p. 24-59
change

$$\vec{E}_s = E_y(x,y)\, e^{-j\beta z}\hat{a}_y$$

This allows for field variation of the *y* directed electric field *to*

$$\vec{E}_s = E_x(x,y)\, e^{-j\beta z}\hat{a}_x + E_y(x,y)\, e^{-j\beta z}\hat{a}_y$$

This allows for field variation of the *x* and *y* directed electric field
p. 25-17
change the first equation on this page to

$$Q = 2\pi\frac{U}{TP} \Rightarrow P = -\frac{dU}{dt} = \frac{\omega_o U}{Q} \Rightarrow \frac{dU}{U} = -\frac{\omega_o dt}{Q}$$

p. 25-32 (provided by Jessica Nordling)
change "where ε_d^* is the complex permeability" *to* "where ε_d^* is the complex permittivity"
p. 27-8
add (assuming $C_3 = 0$) in the following phrase (see the discussion in Helpful Notes)
cannot change instantaneously, initially all of the voltage must appear across the load (assuming $C_3 = 0$):
p. 27-9
change
The equation describing the charge on the surface of the inner conductor is then given by

$$q_2(t) = Q_2\left(1 - e^{-\frac{t}{\tau}}\right) \quad t \geq 0 \qquad (27.2)$$

to
The equation describing the charge on the capacitor C_3 is given by

$$q_3(t) = Q_2 e^{-\frac{t}{\tau}} \quad t \geq 0 \qquad (27.2)$$

(see the discussion in Helpful Notes)
p. 27-9
change (27.4) *to*

$$i = -\frac{dq_3(t)}{dt} = \frac{Q_2}{\tau}e^{-\frac{t}{\tau}} \quad t \geq 0$$

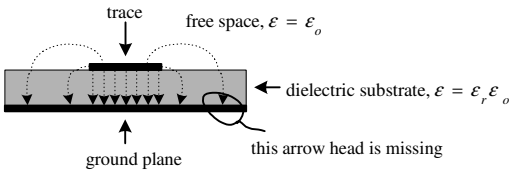
p. 28-37
change "at some distant location far from the inner electrode is" *to* "of the inner electrode relative to the distant outer electrode is"

p. 30-6
change *j*42 *to* *j*43 in the equation

$$I_{ant} = \frac{V_{ant}}{R_o + R_{rad} + jX} = \frac{50}{0.5 + 73 + j42} \approx 0.59\angle -30^\circ \text{ A}$$

Syntax Errors

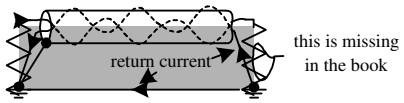
p. vii
add the word "in" in the phrase "my web site and in any future editions"
p. 3-4
in Figure 3.3, an arrow head is missing on the right-most dotted line:



p. 6-3
near the bottom, delete "vs. frequency"
p. 6-4 (provided by Steven Tague, Digital Hardware Inventor)
delete the hyphen in capa-citance
p. 6-21 (provided by Steven Tague, Digital Hardware Inventor)
in the **Ceramic** section, delete the second occurrence of **X7R** in **X7R/X7R/Y5R**
p. 10-72
change "In this table," *to* "In these tables,"
p. 12-41
in the upper spectrum plot, replace "p" with "π" for the label

$$9A\sqrt{3}/2p^2$$

p. 13-3
change "are" *to* "is" in "VSWR of most lines are not measured in this manner"
p. 18-4
in Figure 18.3, a portion of the right-most resistor was accidentally deleted:



p. 18-7
change "(or at even at both chassis)" *to* "(or even at both chassis)"
p. 21-7 (provided by Jessica Nordling)
in (21.16) change u^* *to* μ^*
p. 21-45
for the last equation at the bottom of the page, the right equality should be shifted down
p. 22-12
in "a the nearby object" change "a" *to* "as"
p. 22-25
change "has skin depth" *to* "has a skin depth"
p. 22-34
change "The capacitance between" *to* "The capacitance of"
p. 22-47
change "of the sinusoidal" *to* "of the sinusoid"
p. 23-57 (provided by Allan Taylor)
in the center equation, change $|H_{side}|/|H_{side}|$ to
$|H_{side}|/|H_{top}|$
p. 23-61
change k to K in Mathcad 23.4
p. 23-117
change "of the sinusoidal" *to* "of the sinusoid"
p. 24-34
in (24.61), italize δ, μ, and σ
p. 24-71
"In Figure 24.23, the direction of the two surface vectors are also shown . . " change the word "are" *to* "is"
p. 28-34
in Figure 28.30, change s_1 *to* σ_1 and s_2 *to* σ_2
p. 30-75
change "(with an open end)" *to* "(with open ends)"