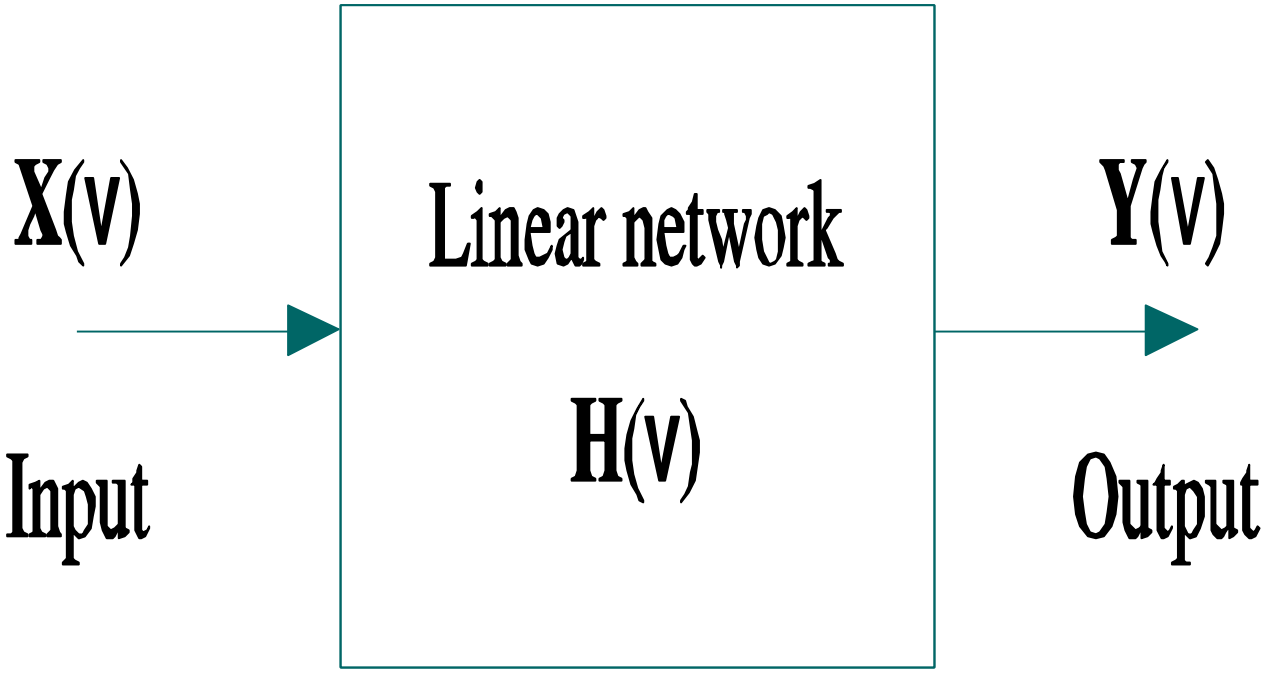
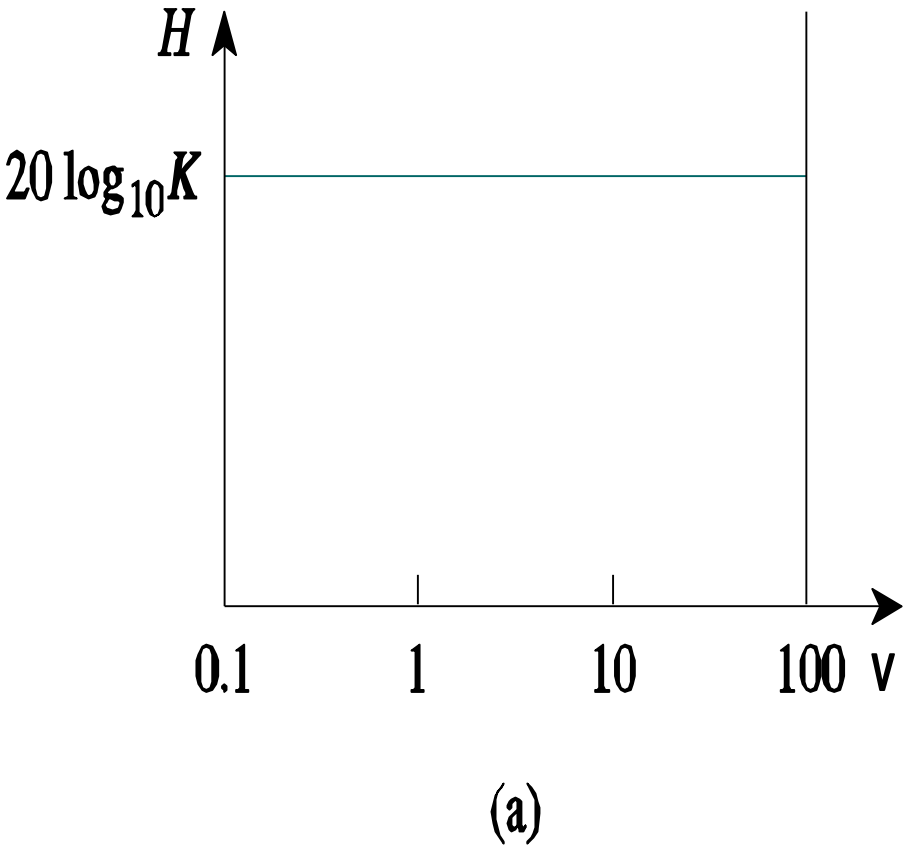
Fig. 14.1 A block diagram representation of a linear network

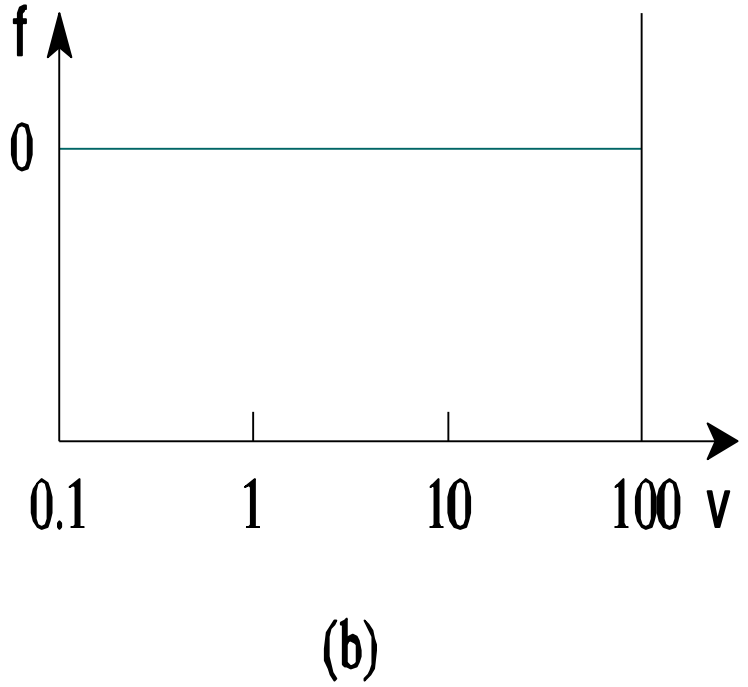




© The McGraw-Hill Companies, Inc.

Fig. 14.9 Bode plots for gain K: a) magnitude plot b) phase plot

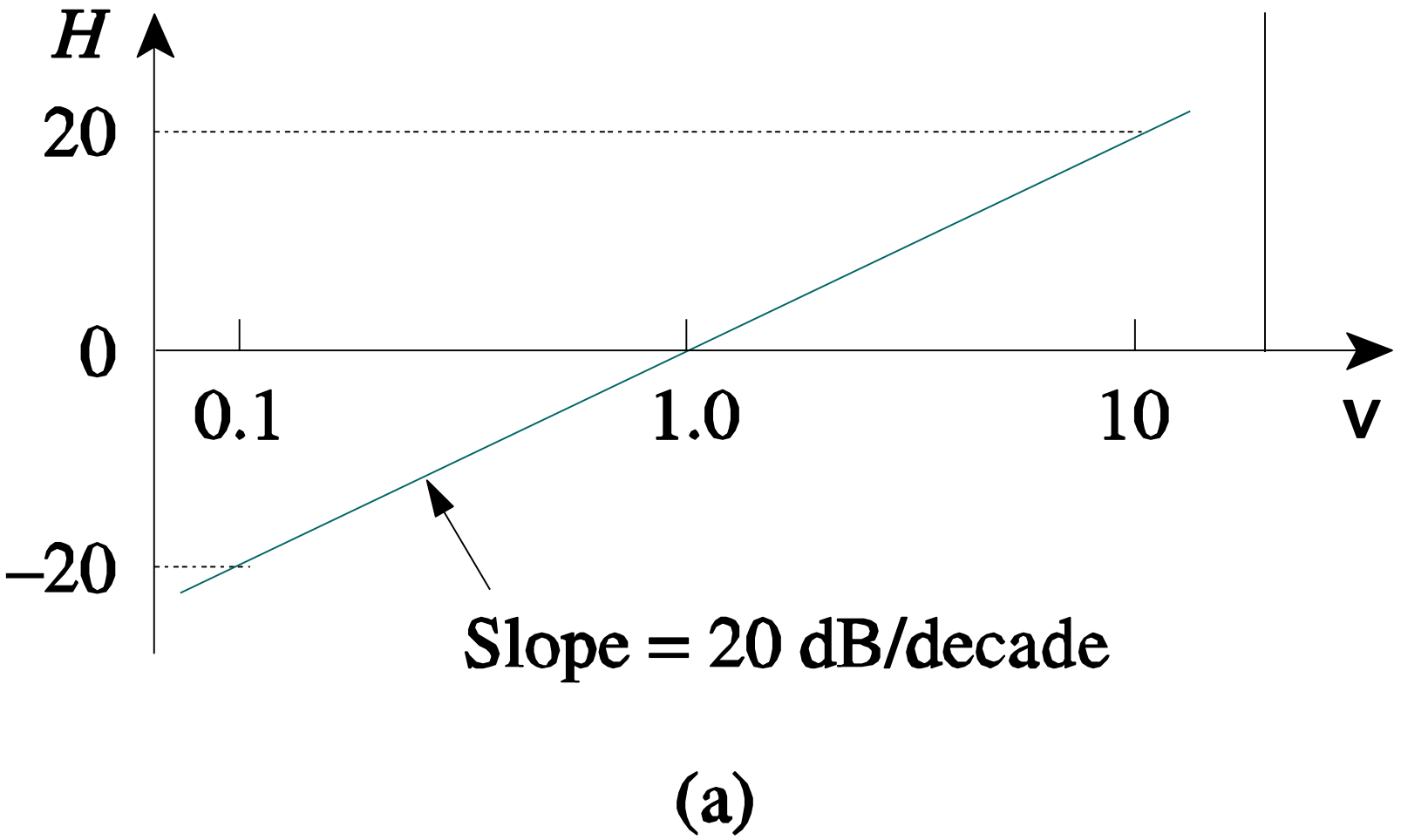




© The McGraw-Hill Companies, Inc.

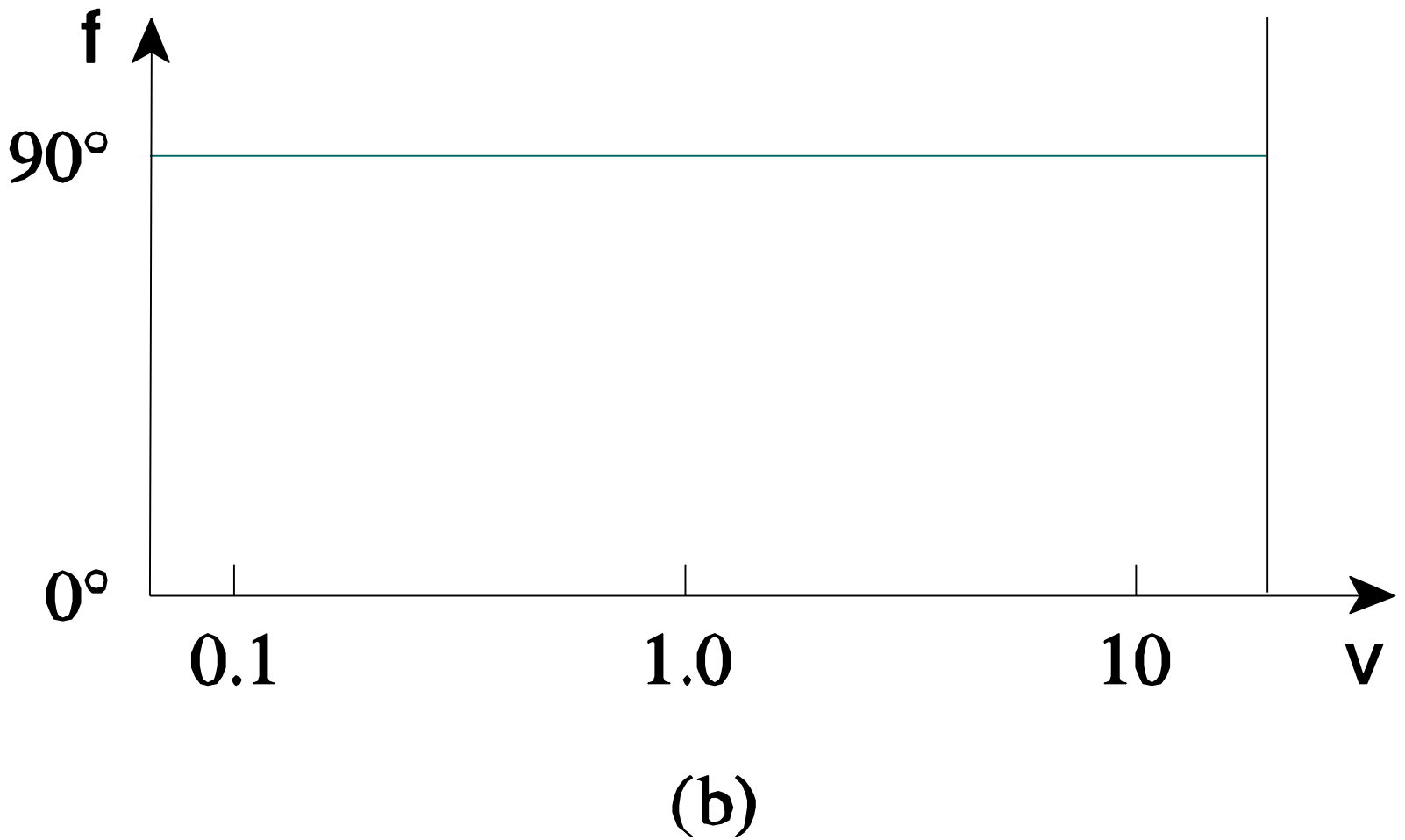
Fig. 14.10 Bode plots for a zero (jω) at the origin: a) magnitude plot, b) phase plot





© The McGraw-Hill Companies, Inc.

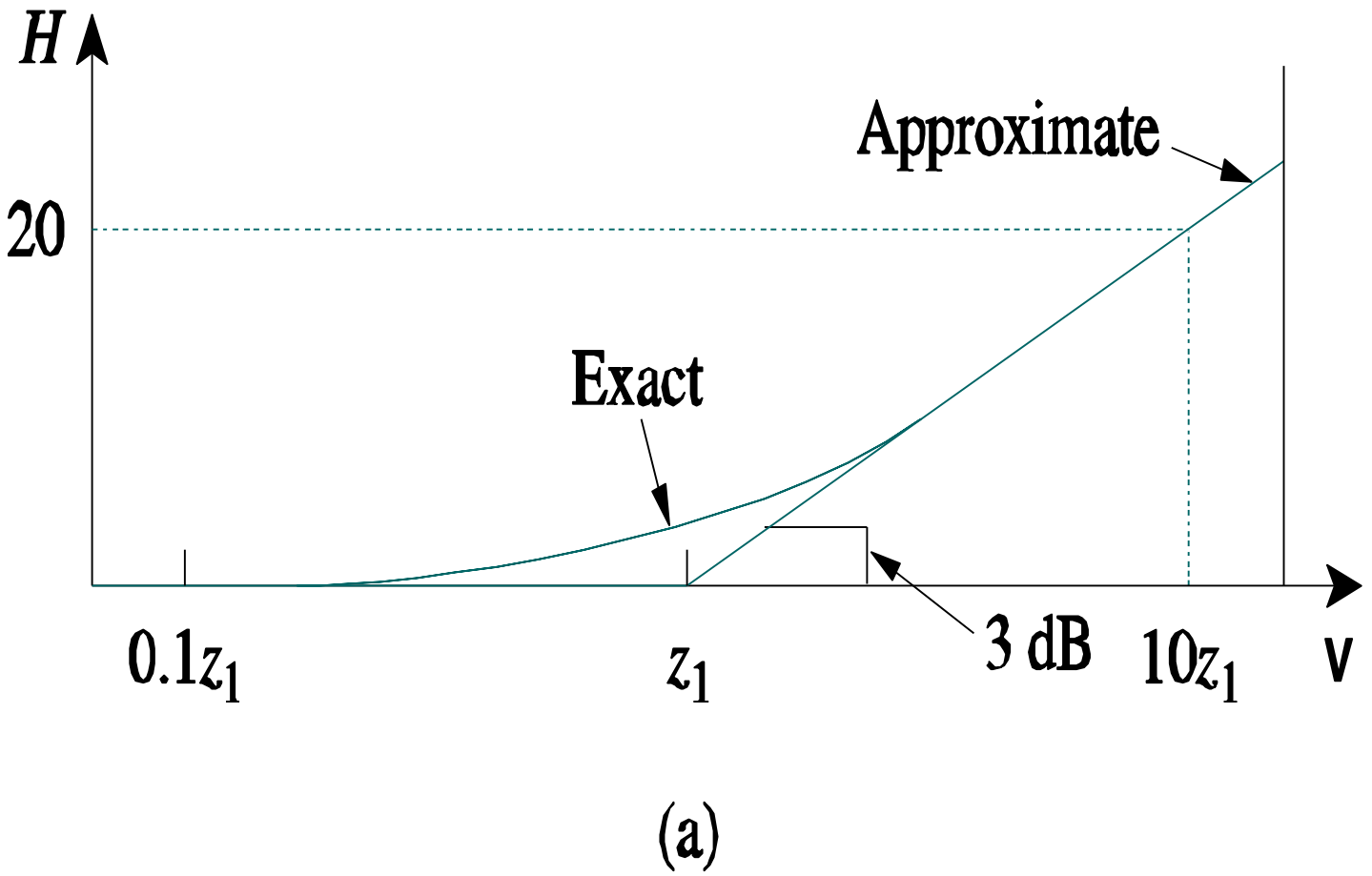
Fig. 14.10 Bode plots for a zero (jω) at the origin: a) magnitude plot, b) phase plot





© The McGraw-Hill Companies, Inc.

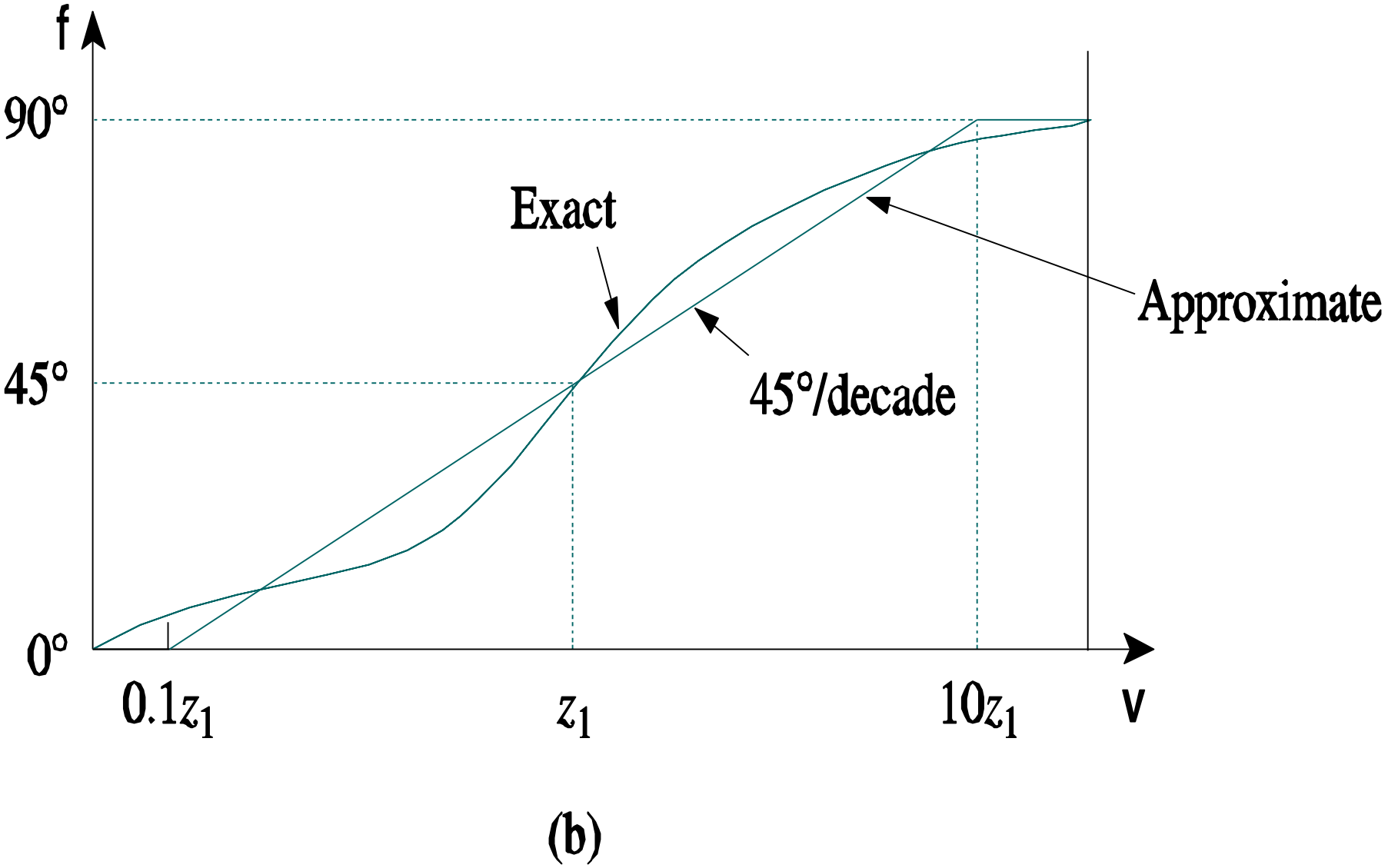
Fig. 14.11 Bode plots of zero$(1 + j\omega/z_1)$: (a) magnitude plot, (b) phase plot.





© The McGraw-Hill Companies, Inc.

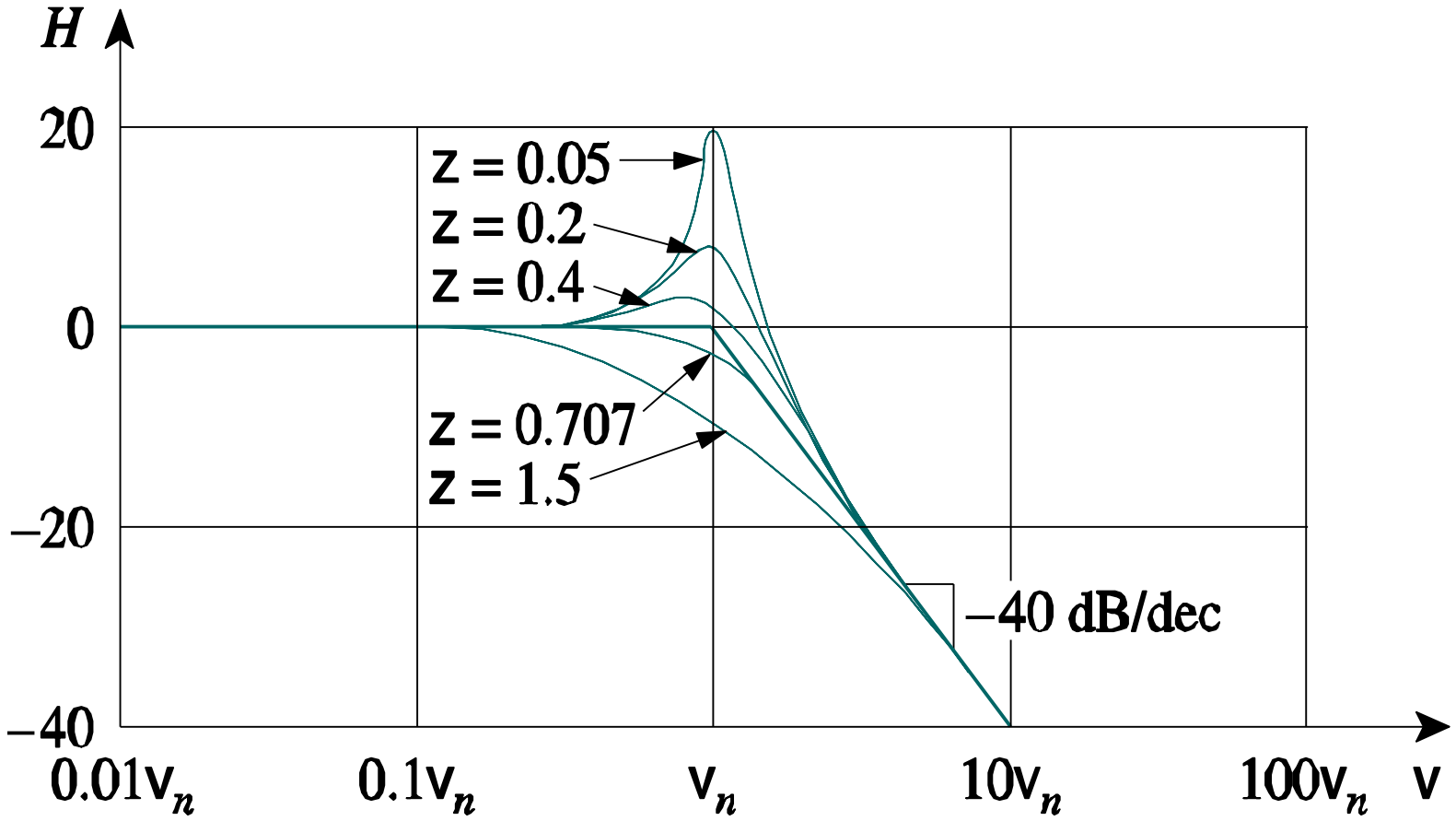
Fig. 14.11 Bode plots of zero$(1 + j\omega/z_1)$: (a) magnitude plot, (b) phase plot.





© The McGraw-Hill Companies, Inc.

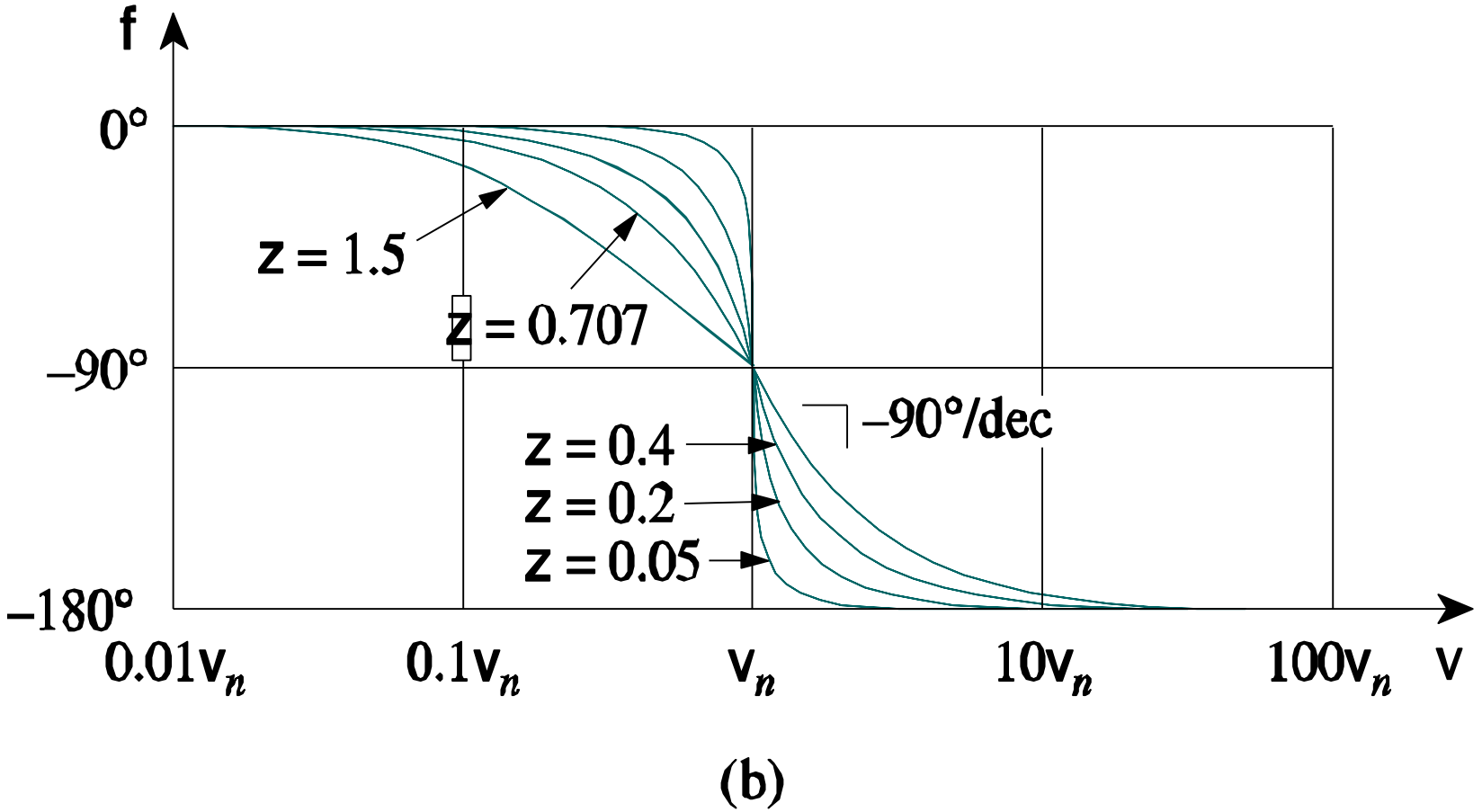
Fig. 14.12 Bode plots of quadratic pole $[ 1 + j2\zeta\omega/\omega_n - \omega^2/\omega_n^2]^{-1}$ : a) magnitude plot




(a)


© The McGraw-Hill Companies, Inc.

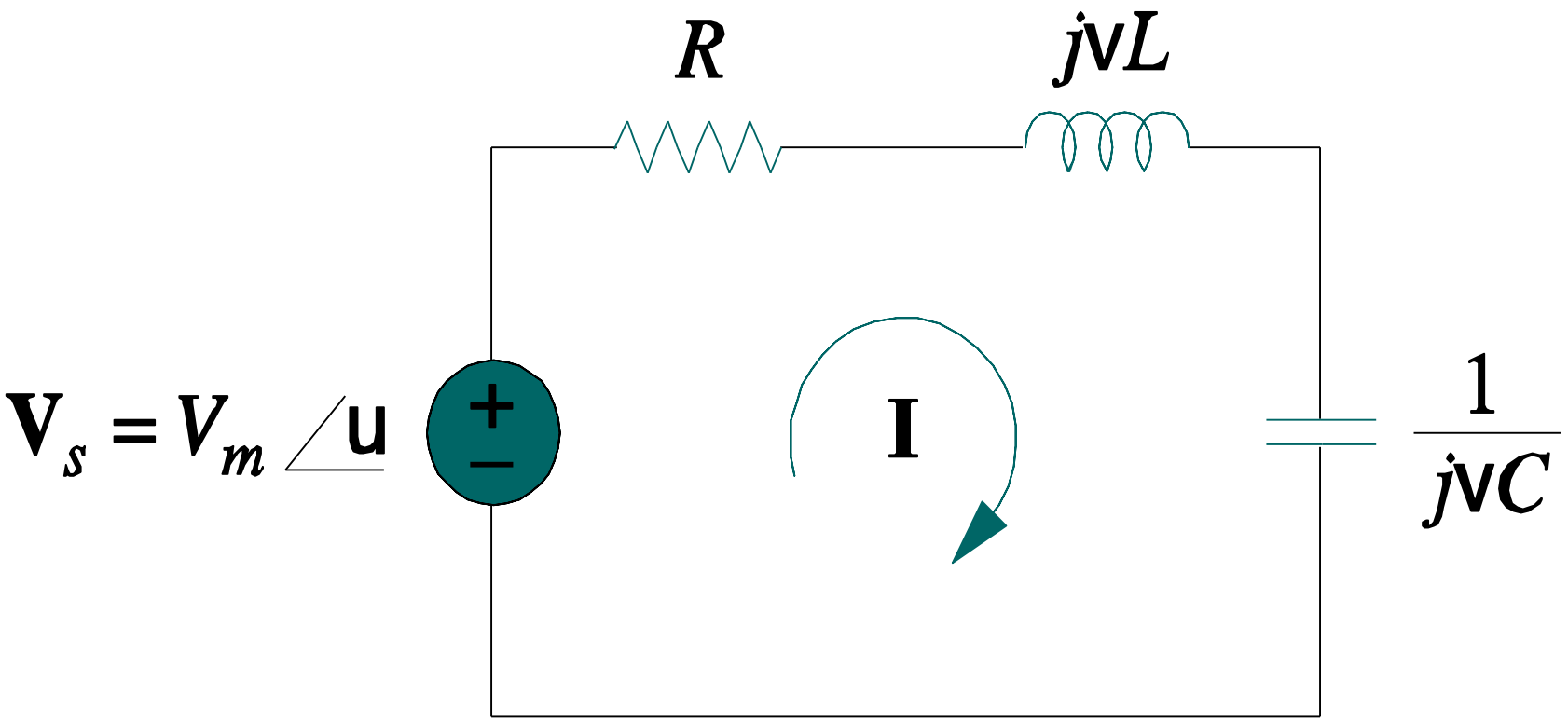
Fig. 14.12 Bode plots of quadratic pole $[ 1 + j2\zeta\omega/\omega_n - \omega^2/\omega_n^2]^{-1}$ : b) phase plot





© The McGraw-Hill Companies, Inc.

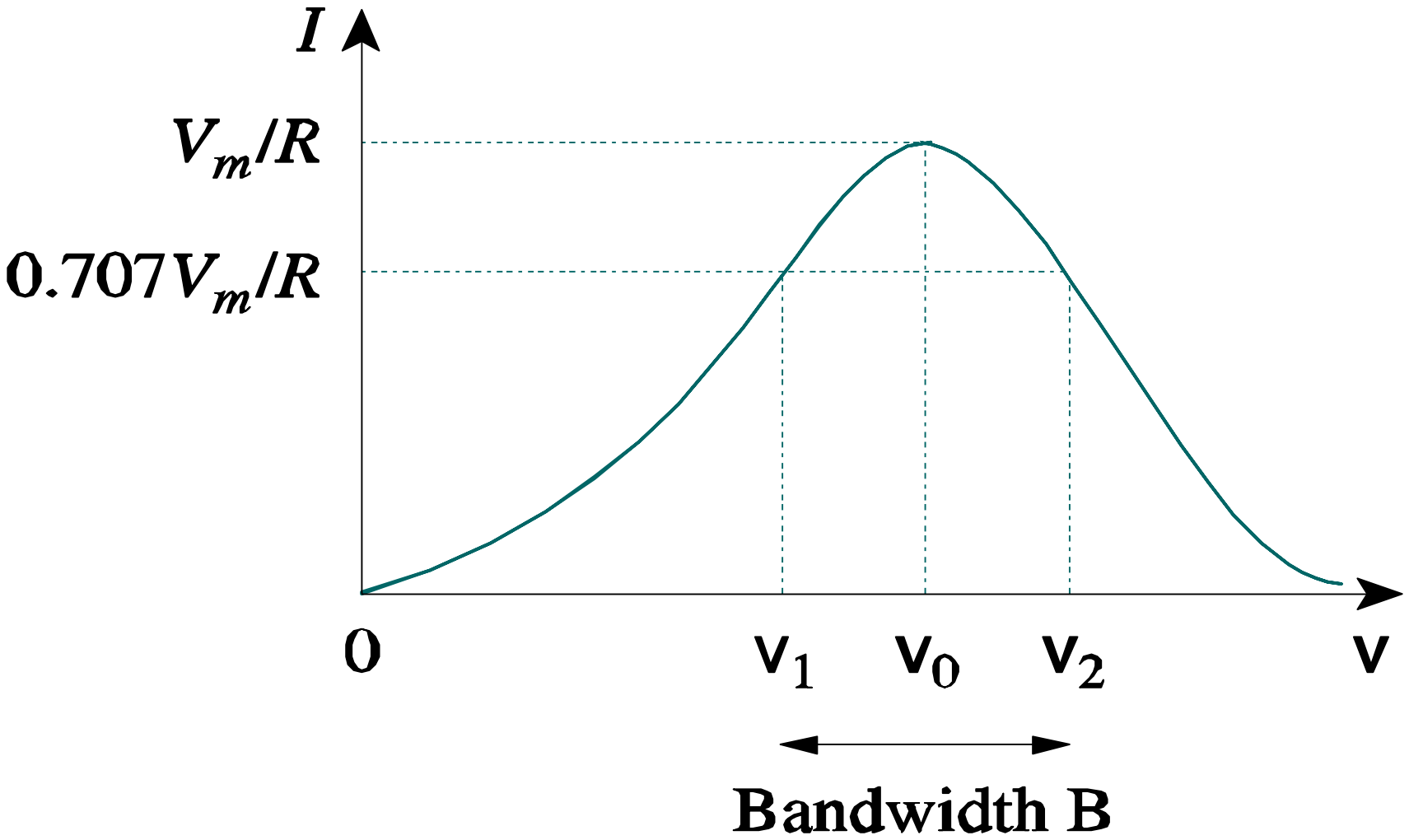
Fig. 14.21 The series resonant circuit





© The McGraw-Hill Companies, Inc.

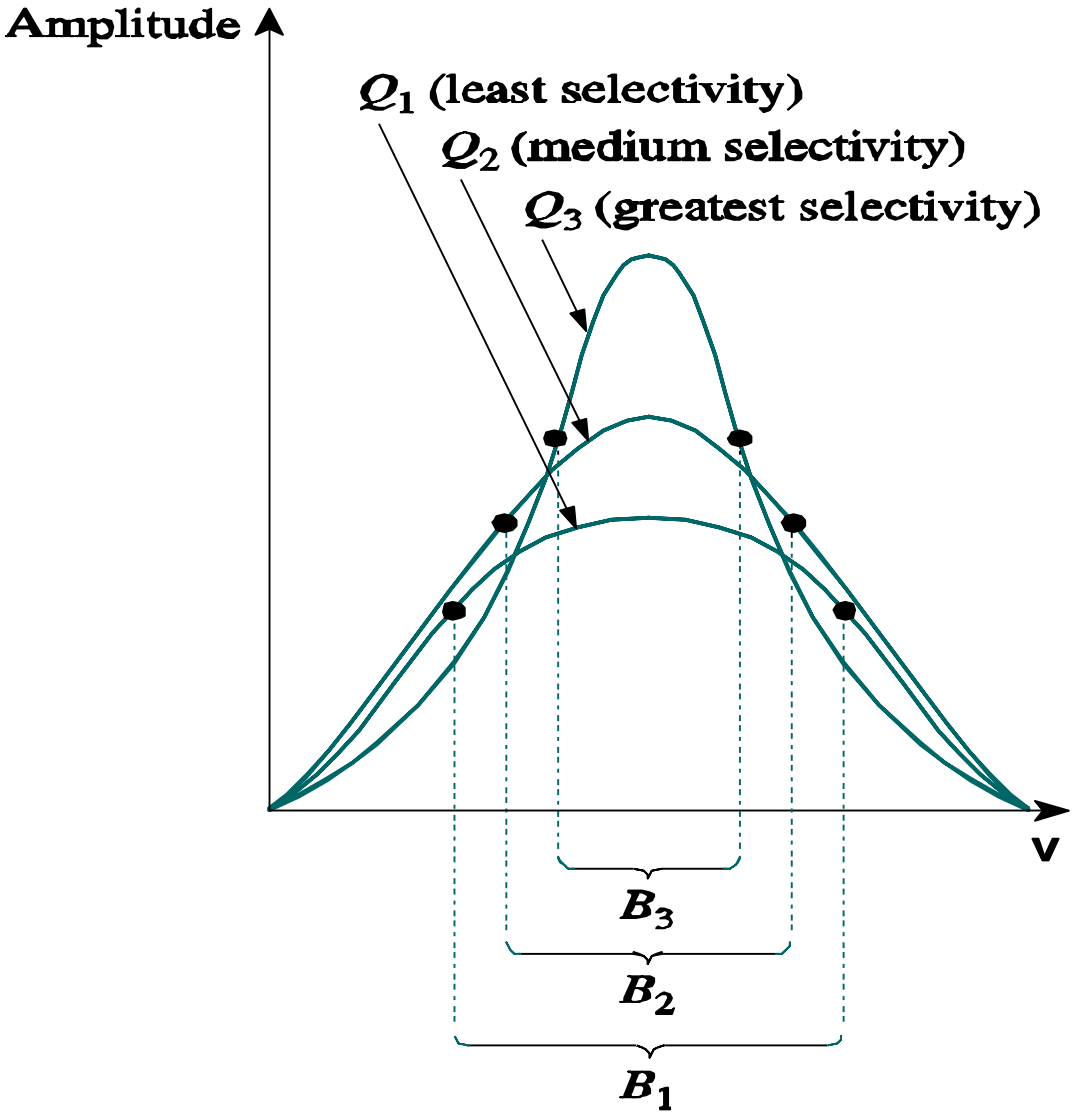
Fig.14.22 The current amplitude vs. frequency for the series resonant circuit of Fig 14.25





© The McGraw-Hill Companies, Inc.

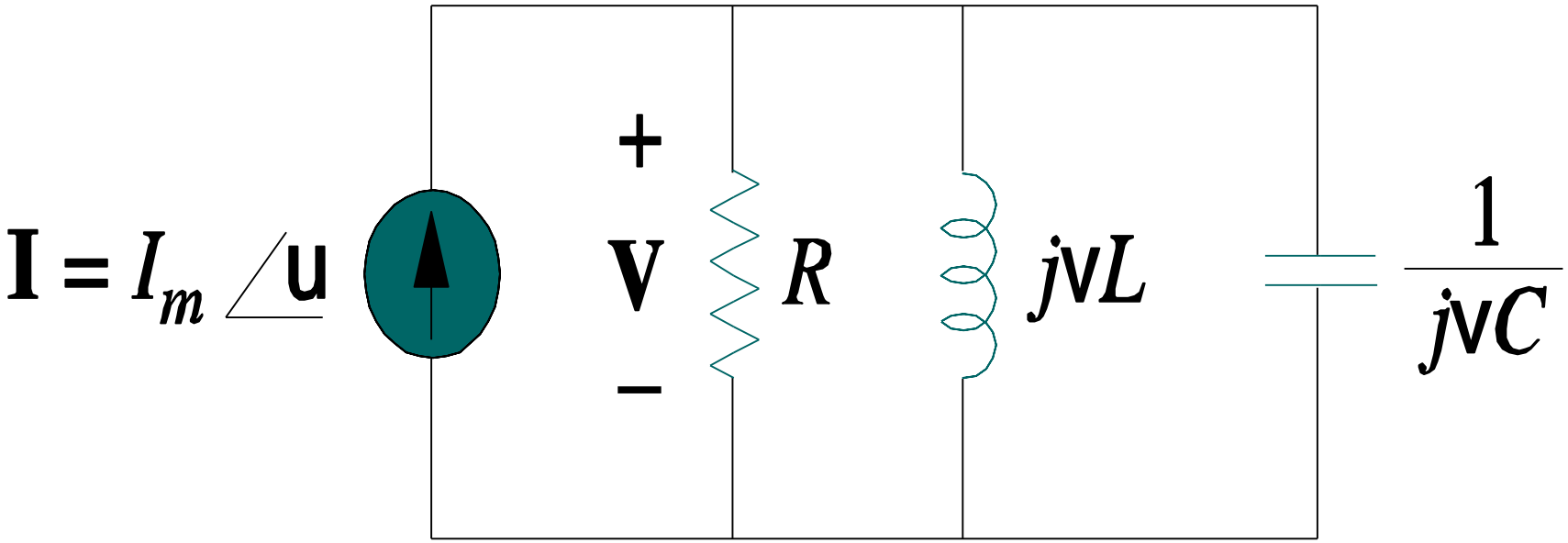
Fig. 14.23 The higher the circuit Q, the smaller the bandwidth





© The McGraw-Hill Companies, Inc.

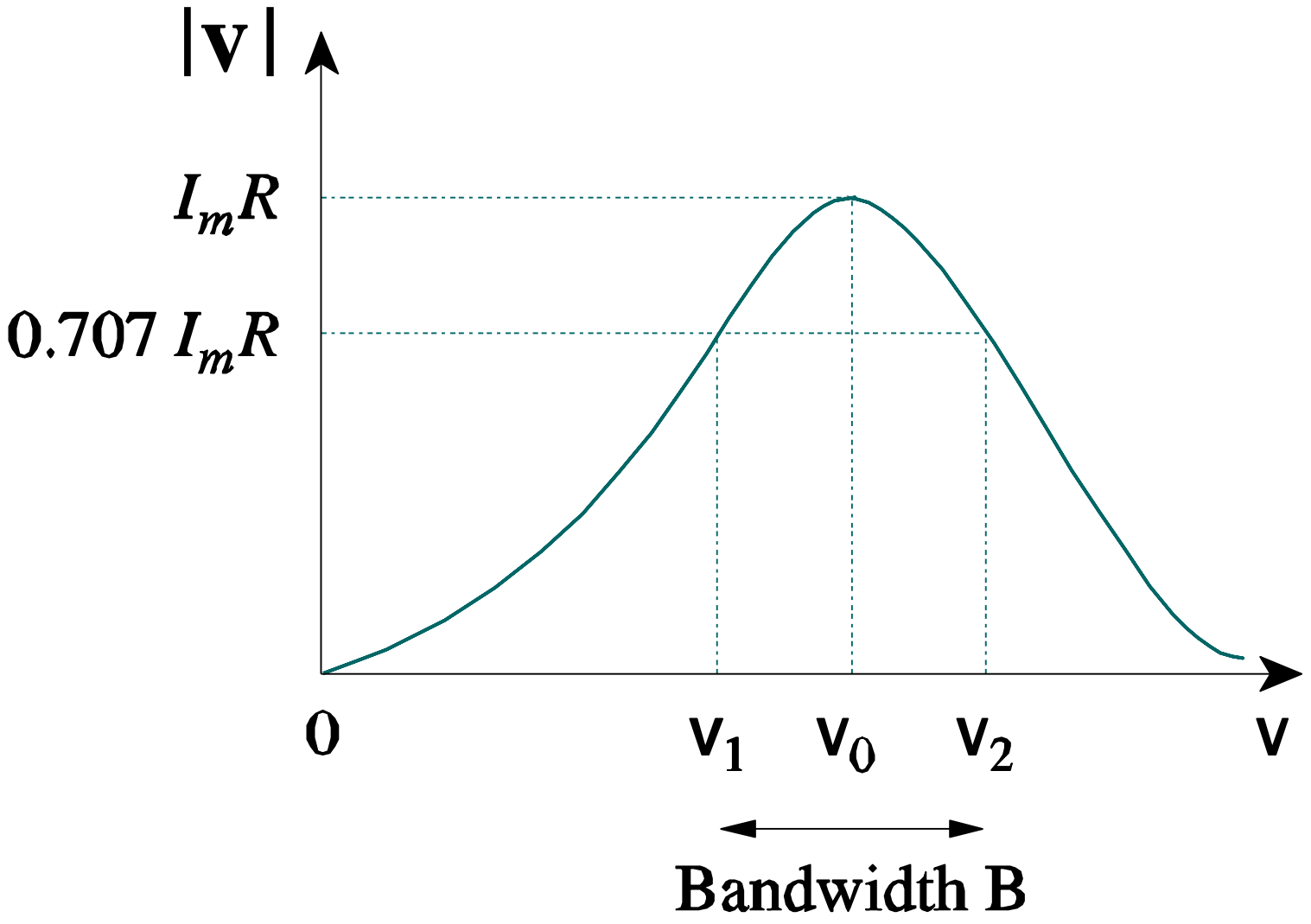
Fig. 14.25 The parallel-resonant circuit





© The McGraw-Hill Companies, Inc.

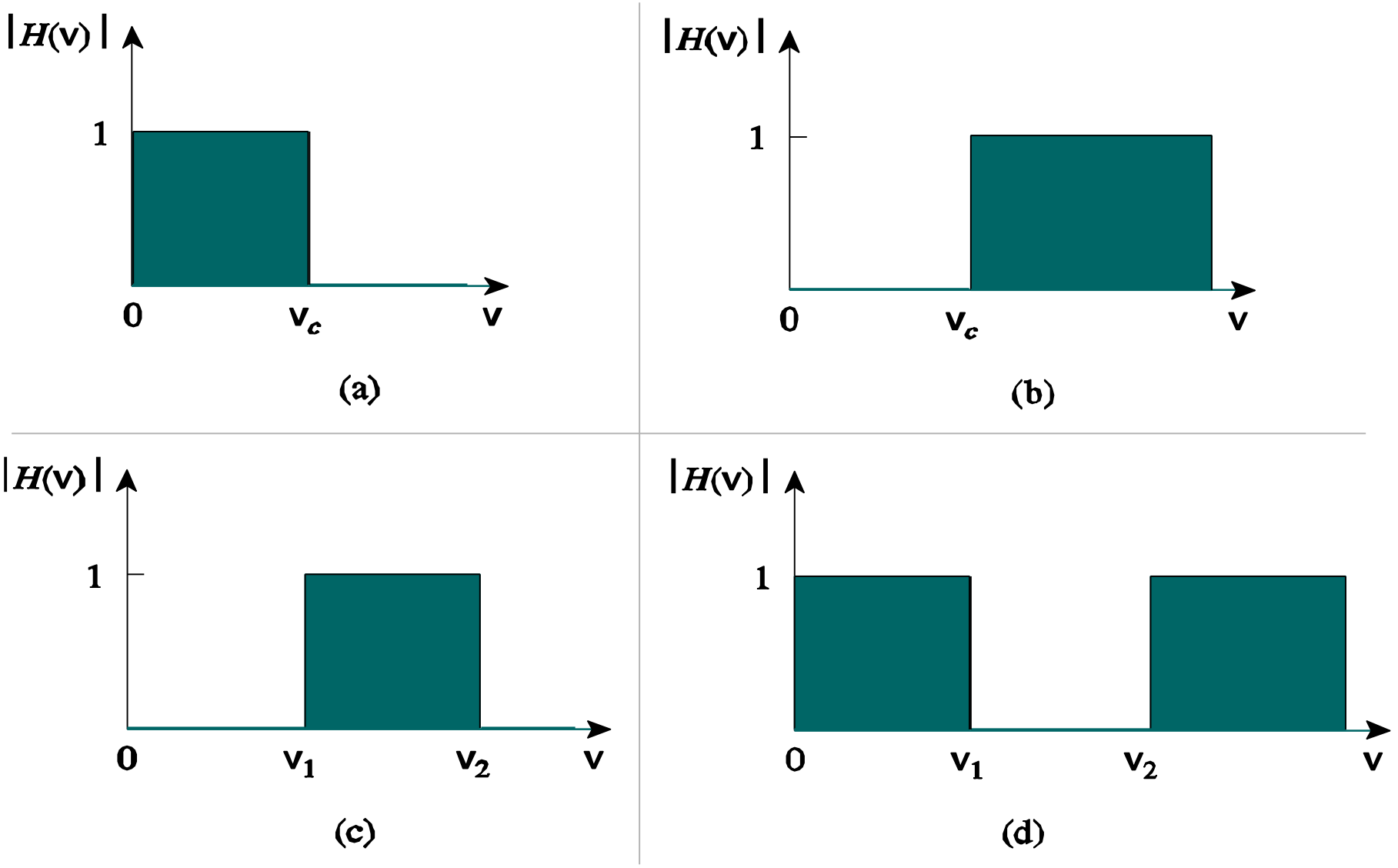
Fig. 14.26 the current amplitude vs. frequency for the series-resonant circuit of Fig. 14.25





© The McGraw-Hill Companies, Inc.

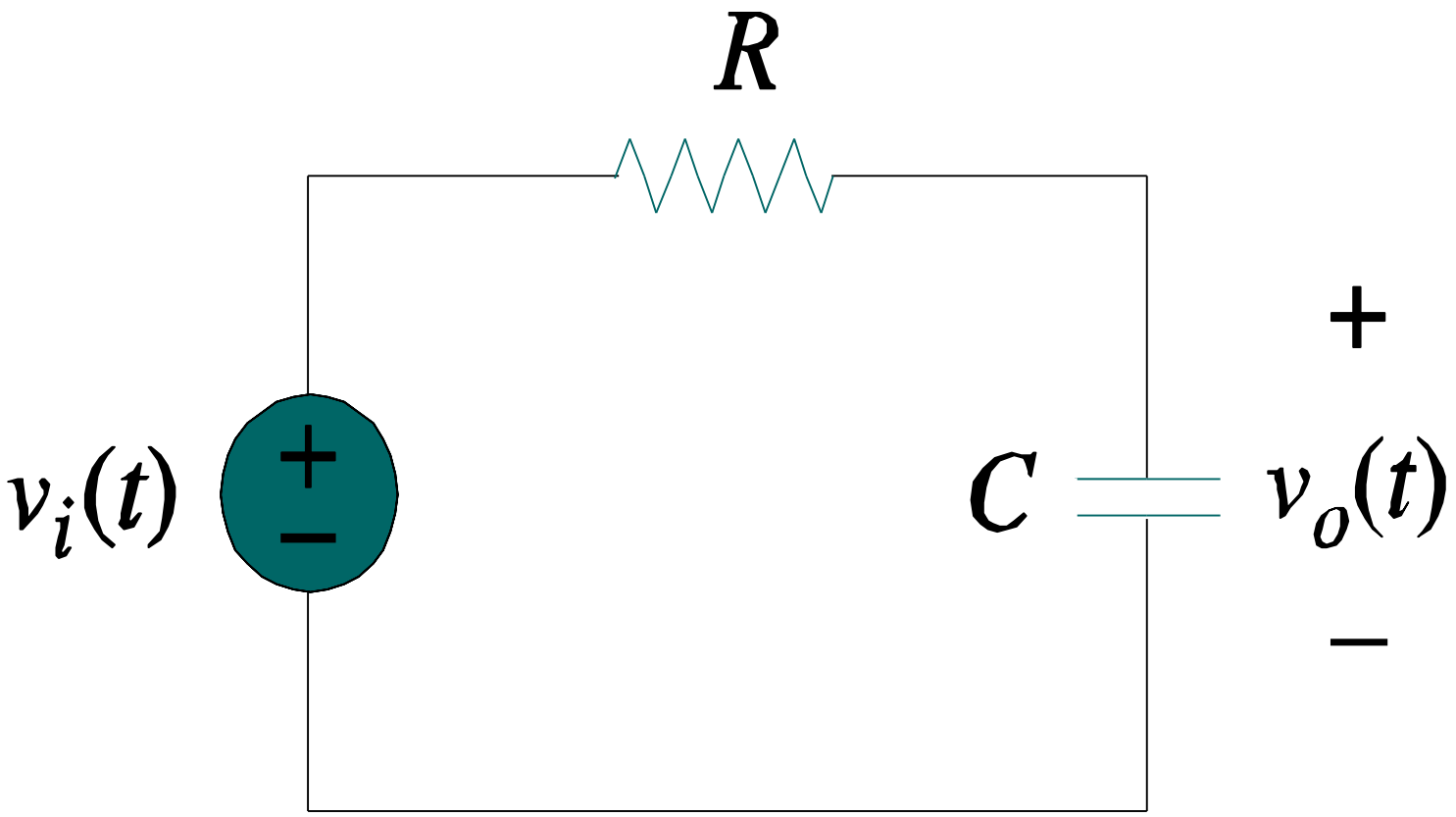
Fig. 14.30 Ideal frequency response of four types of filters: a) lowpass, b) highpass, c) bandpass, d) bandstop





© The McGraw-Hill Companies, Inc.

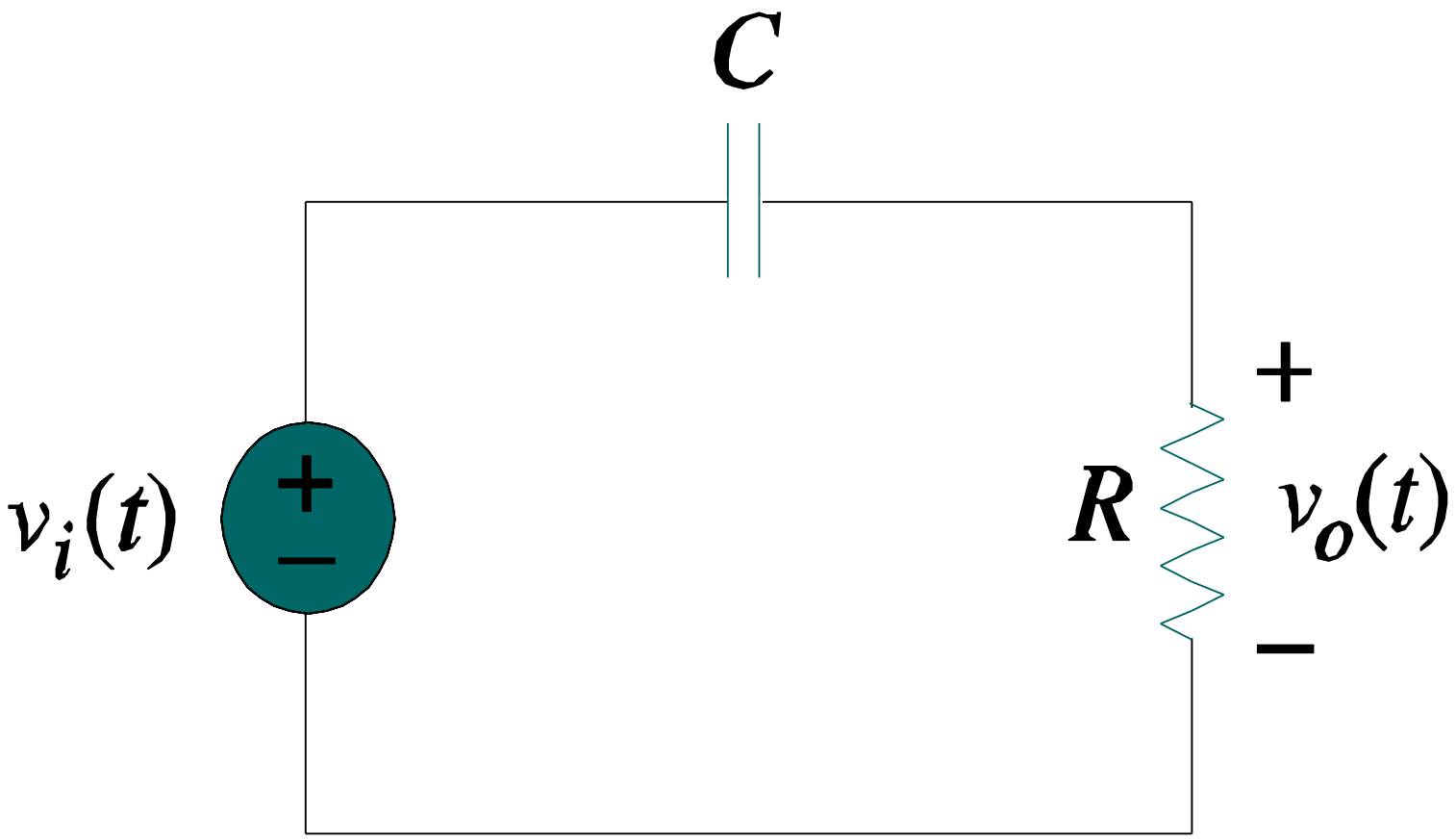
Fig. 14.31 A lowpass filter





© The McGraw-Hill Companies, Inc.

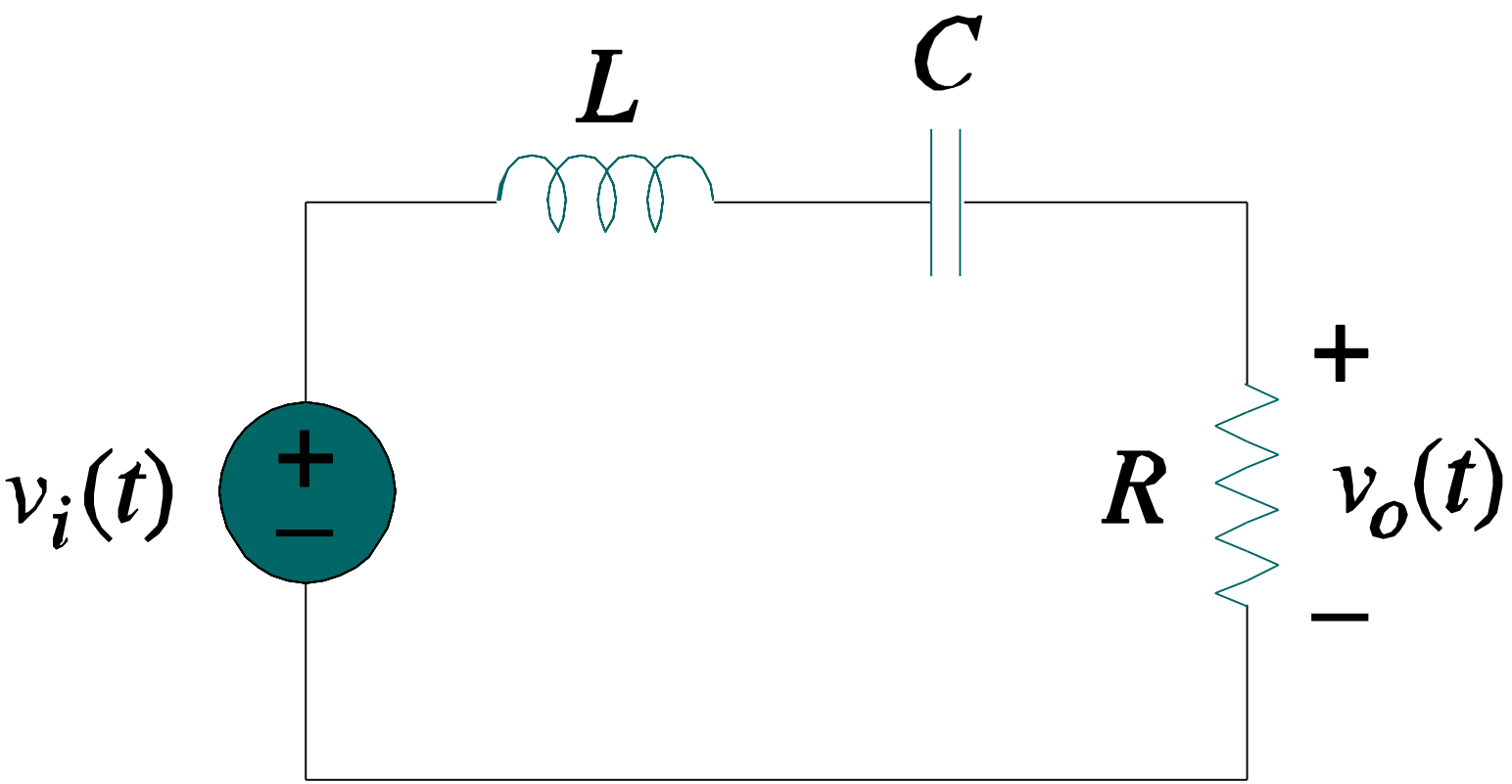
Fig. 14.33 A highpass filter





© The McGraw-Hill Companies, Inc.

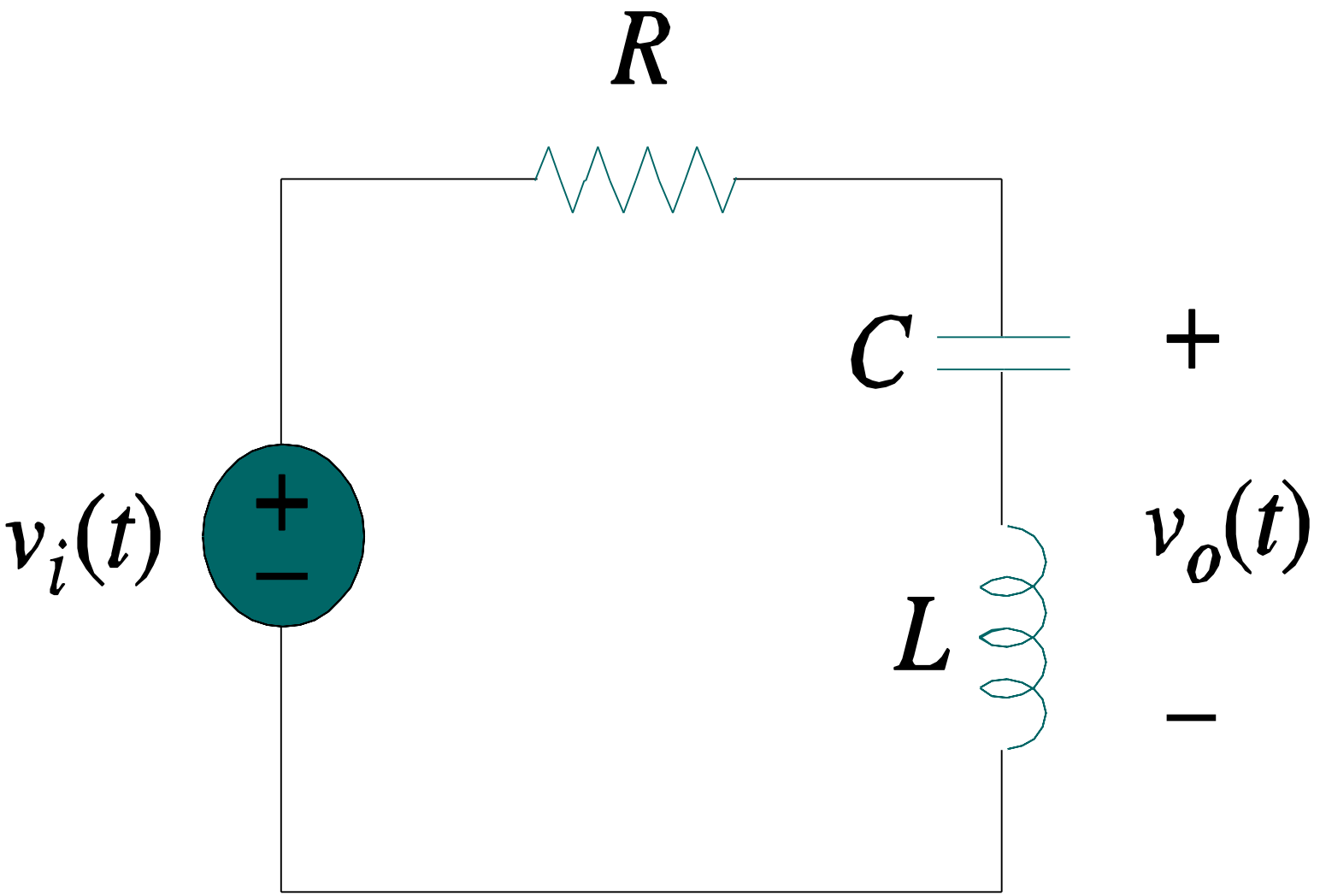
Fig. 14.35 A bandpass filter





© The McGraw-Hill Companies, Inc.

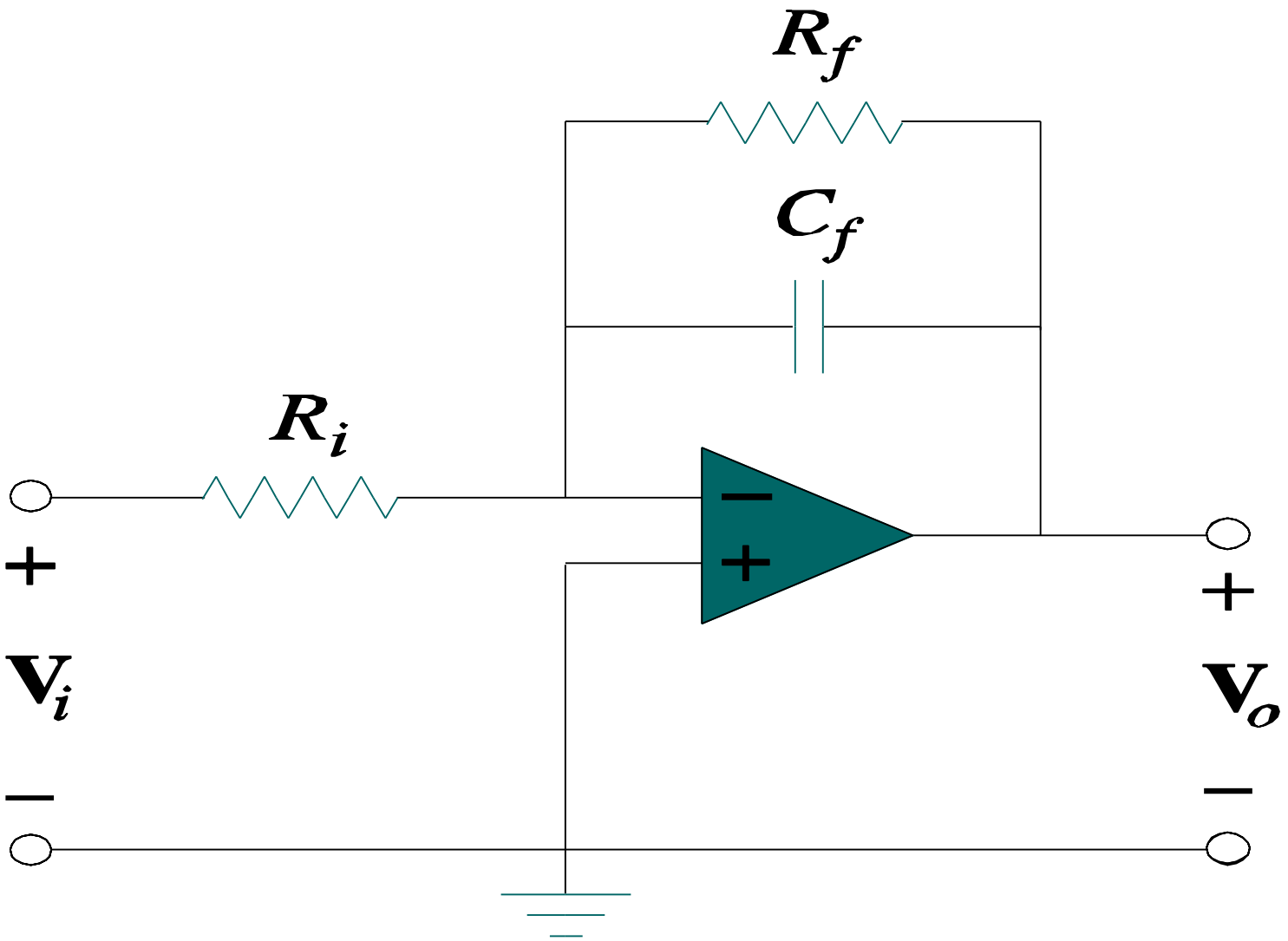
Fig. 14.37 A bandstop filter





© The McGraw-Hill Companies, Inc.

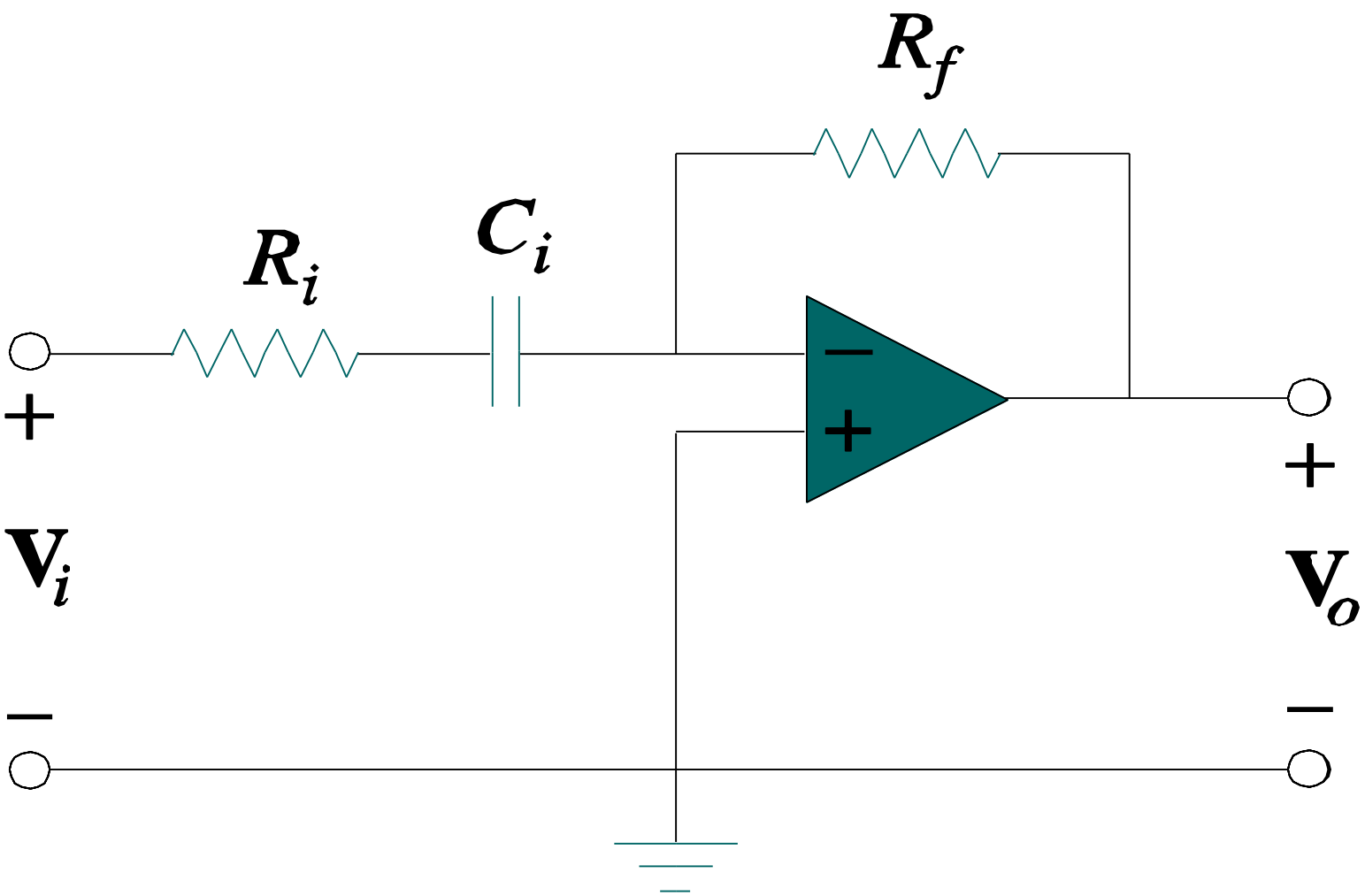
Fig. 14.42 Active first-order low-pass filter





© The McGraw-Hill Companies, Inc.

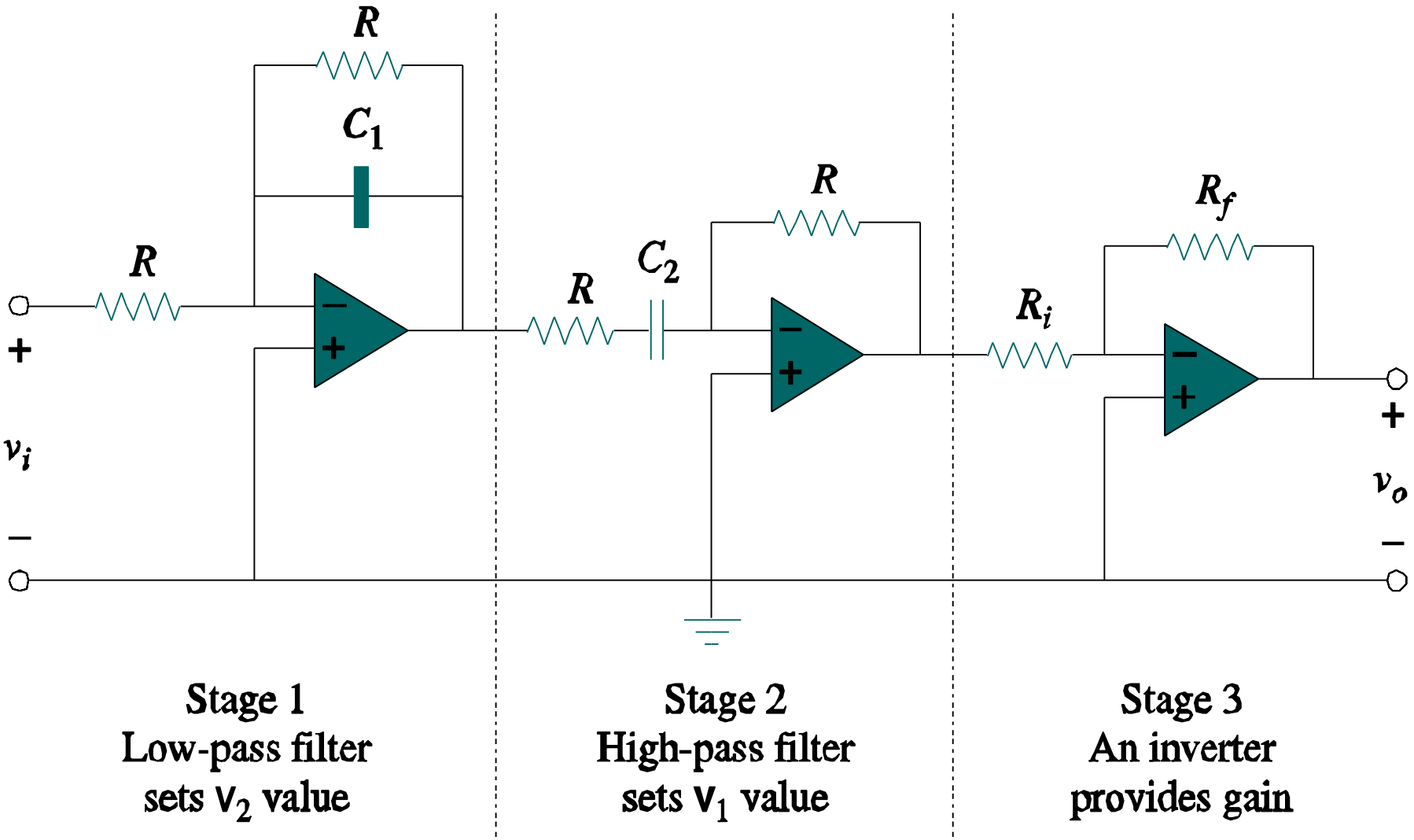
Fig. 14.43 Active first order high-pass filter





© The McGraw-Hill Companies, Inc.

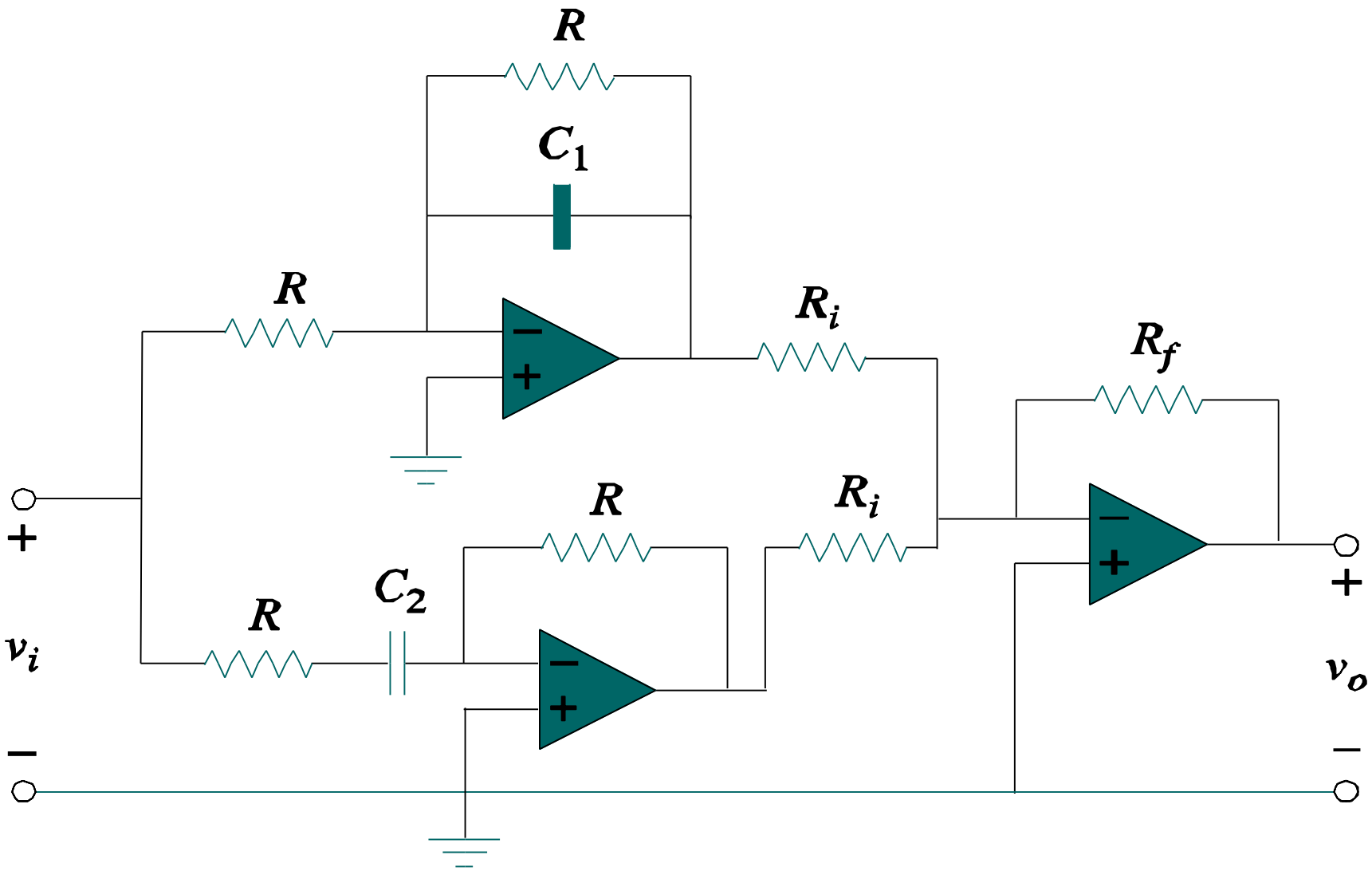
# Fig. 14.45 Active bandpass filter





© The McGraw-Hill Companies, Inc.

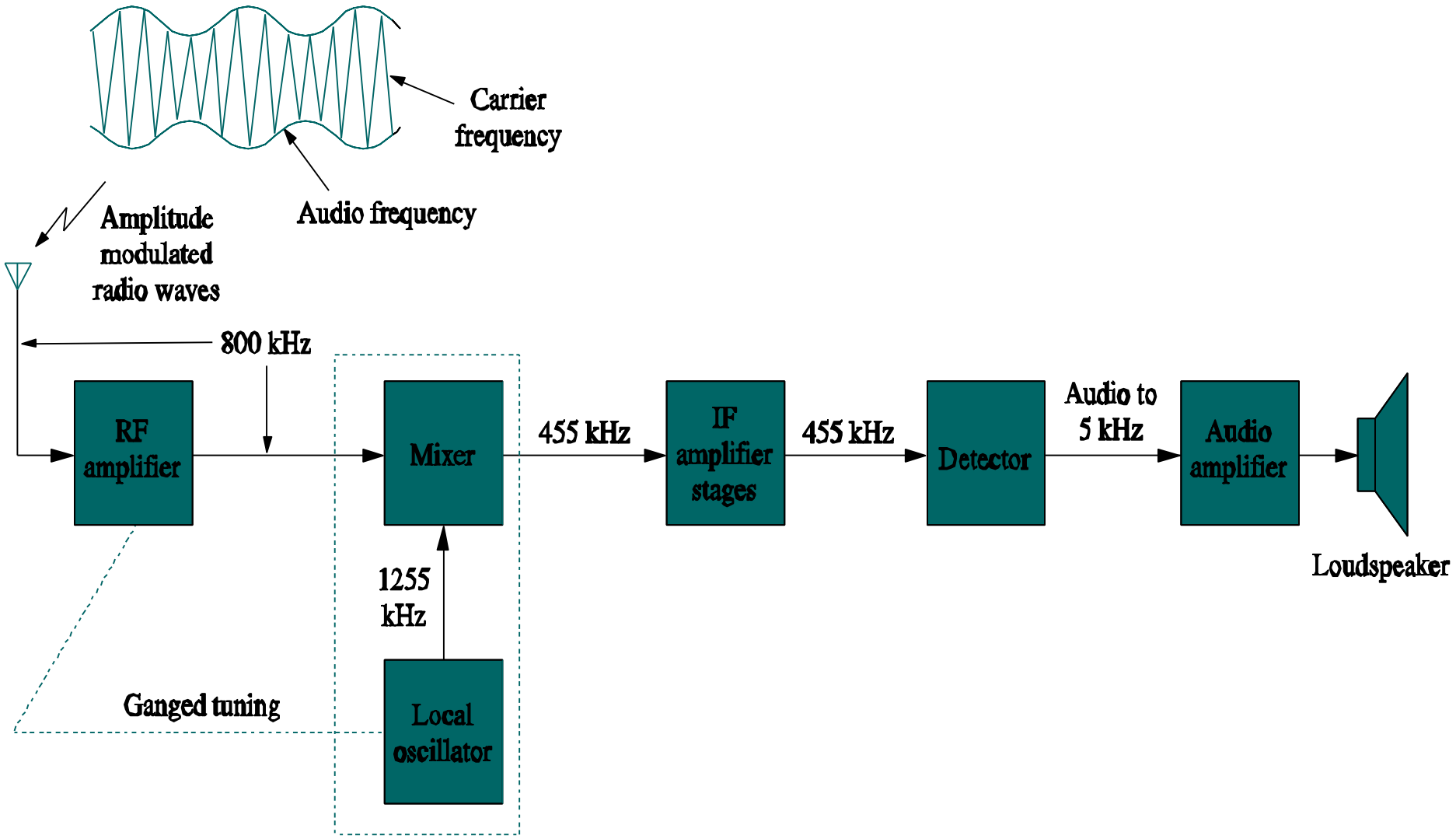
# Fig. 14.47 Active bandreject filter





© The McGraw-Hill Companies, Inc.

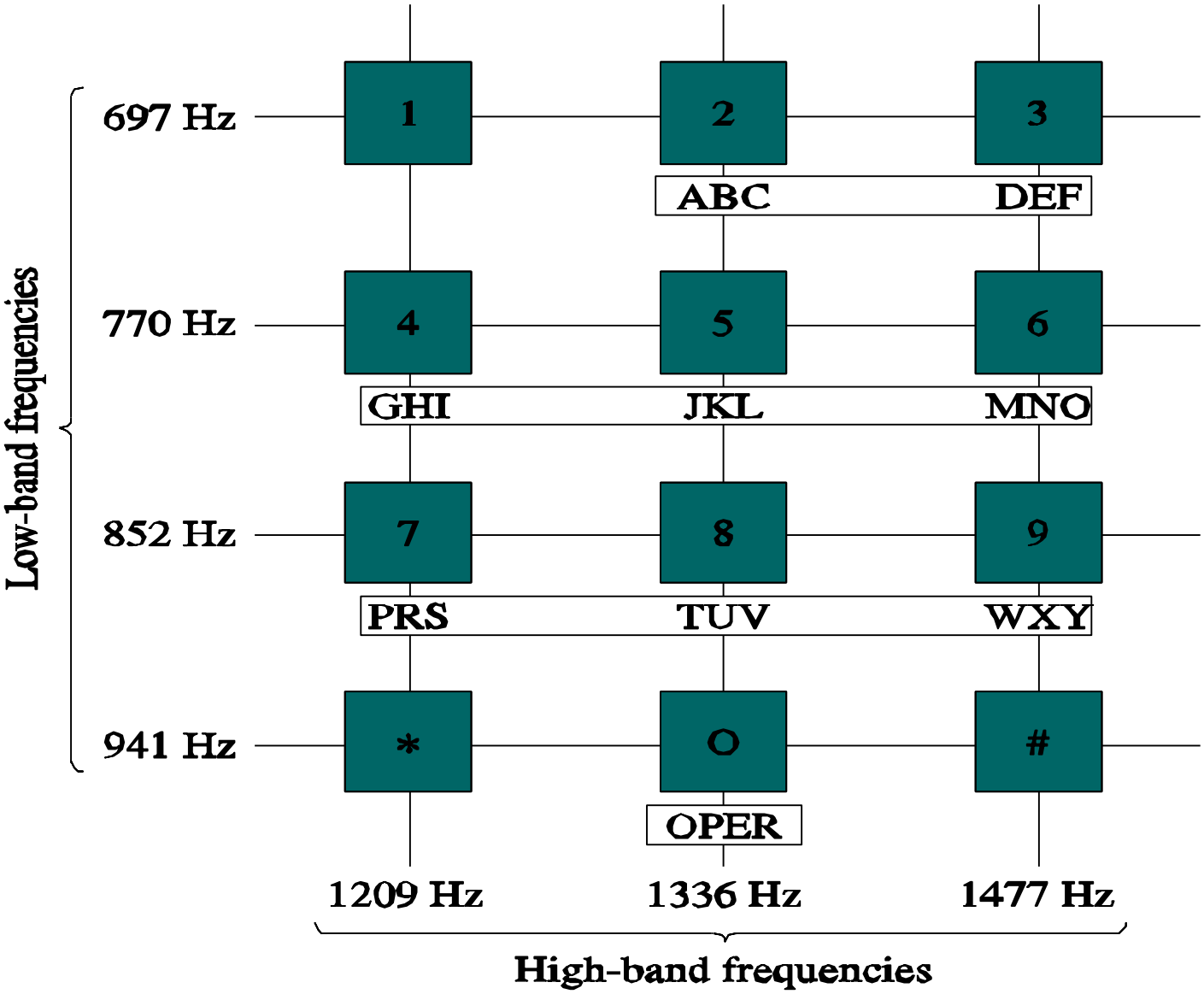
Fig. 14.59 A simplified block diagram of a superheterodyne AM radio receiver





© The McGraw-Hill Companies, Inc.

# Fig. 14.61 Frequency assignments for touch tone dialing





© The McGraw-Hill Companies, Inc.