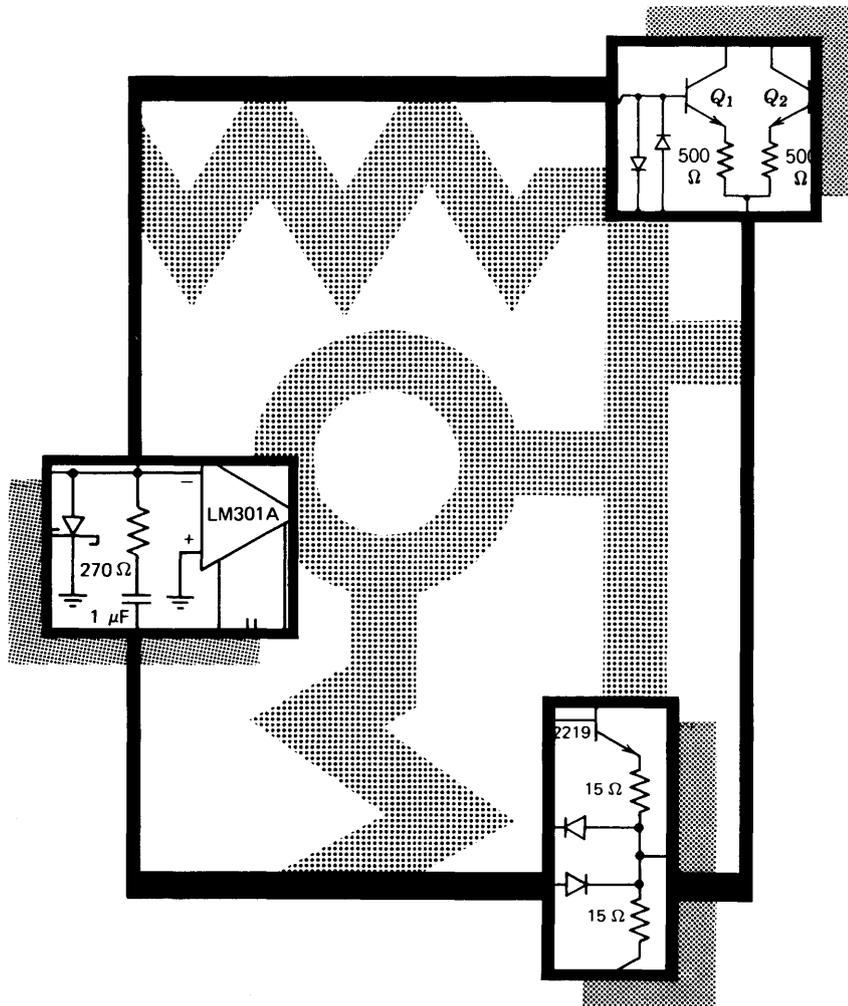


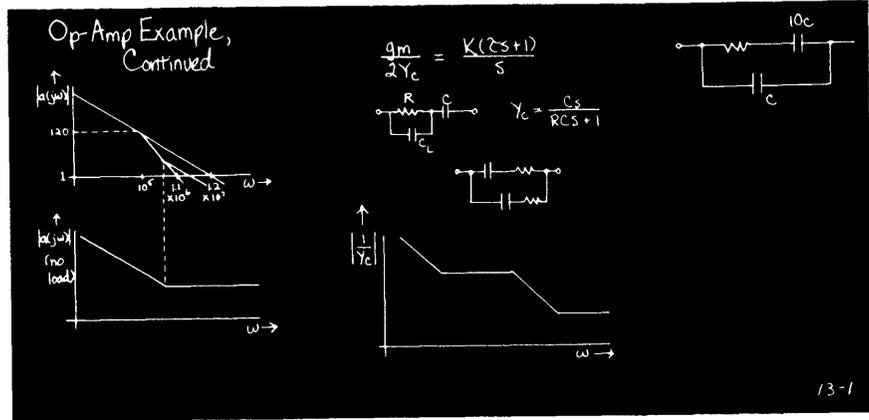
Operational Amplifier Compensation

(continued)

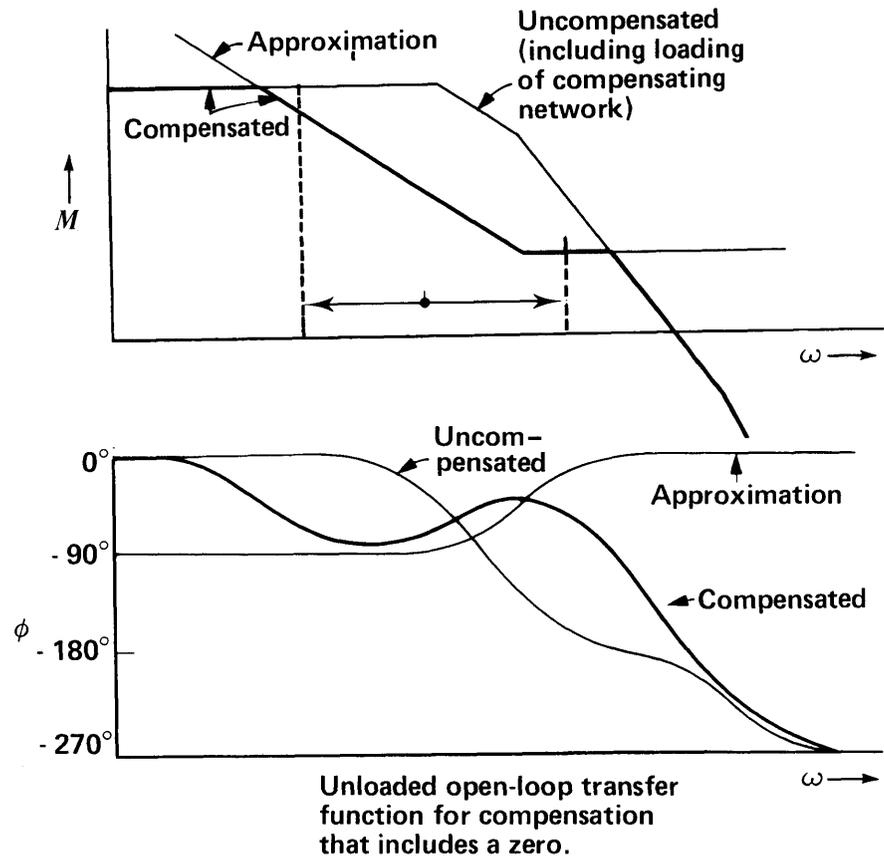
13



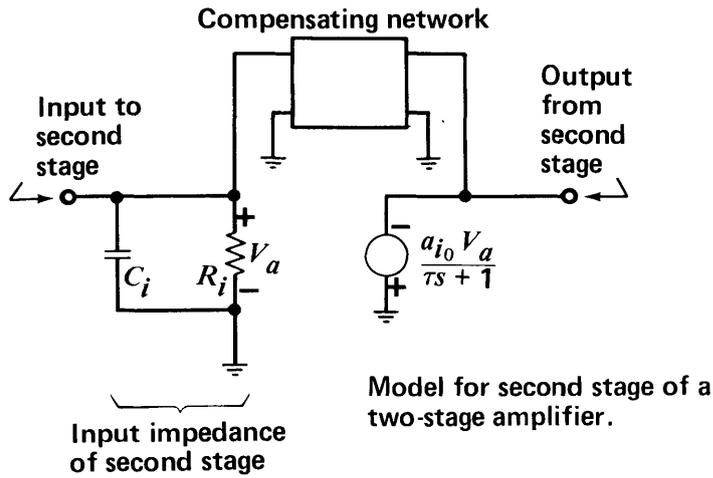
Blackboard 13.1



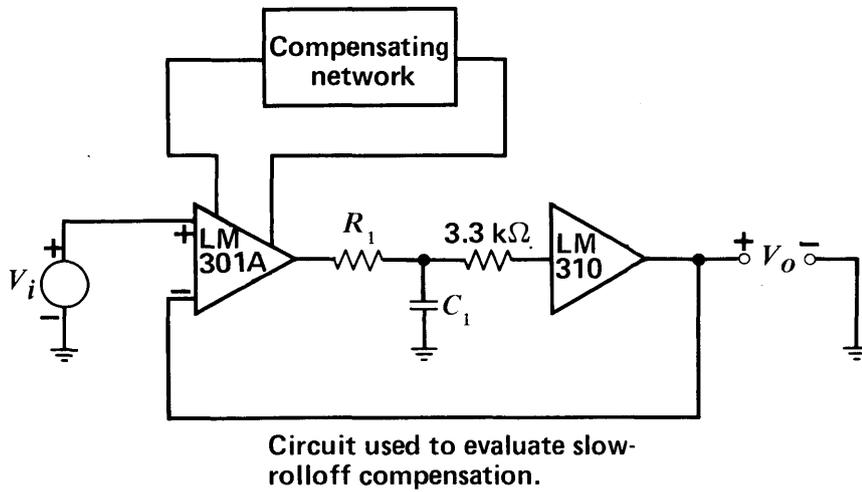
Viewgraph 13.1



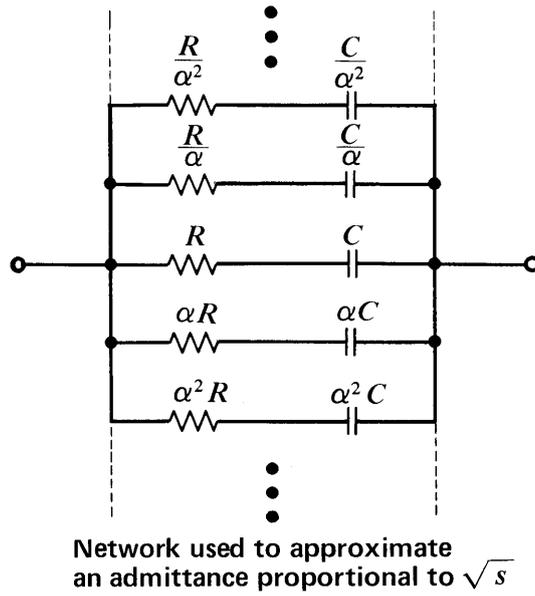
Viewgraph 13.2



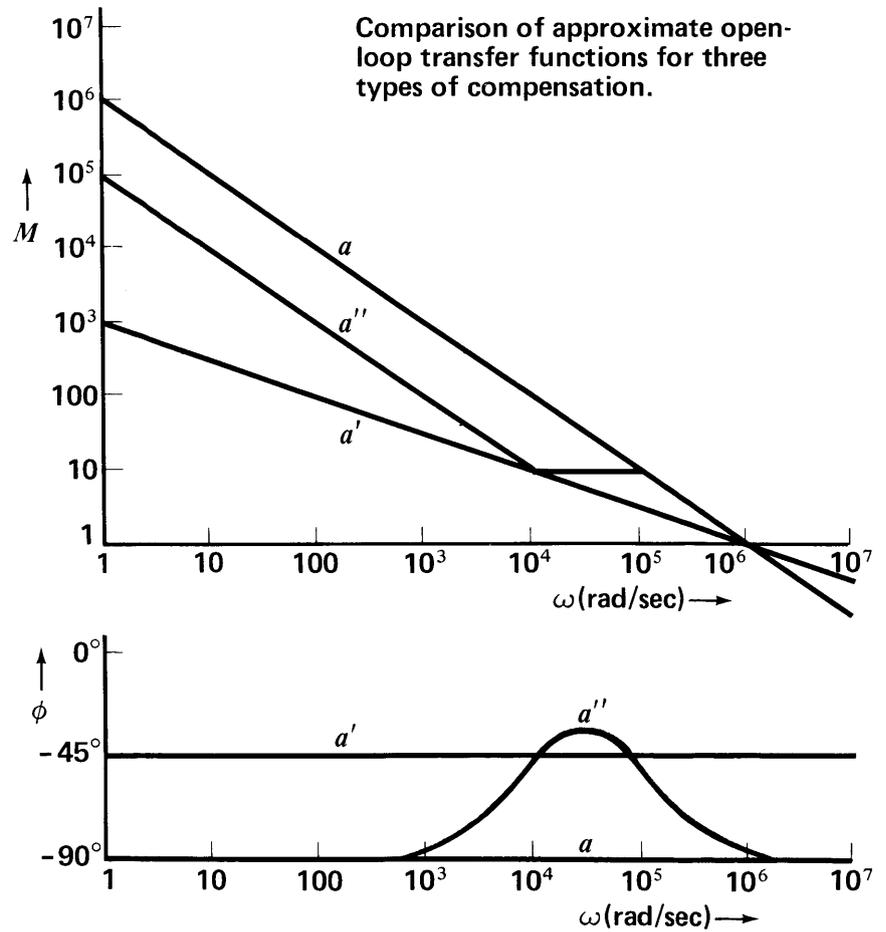
Viewgraph 13.3

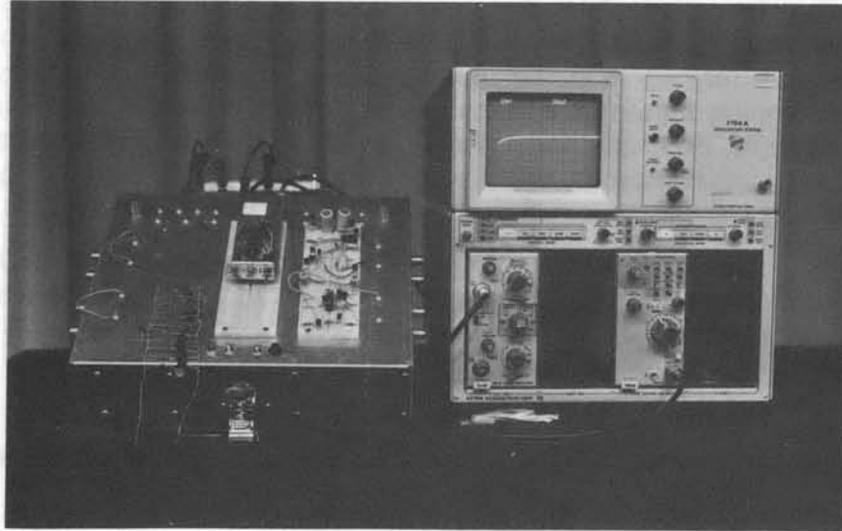


Viewgraph 13.4

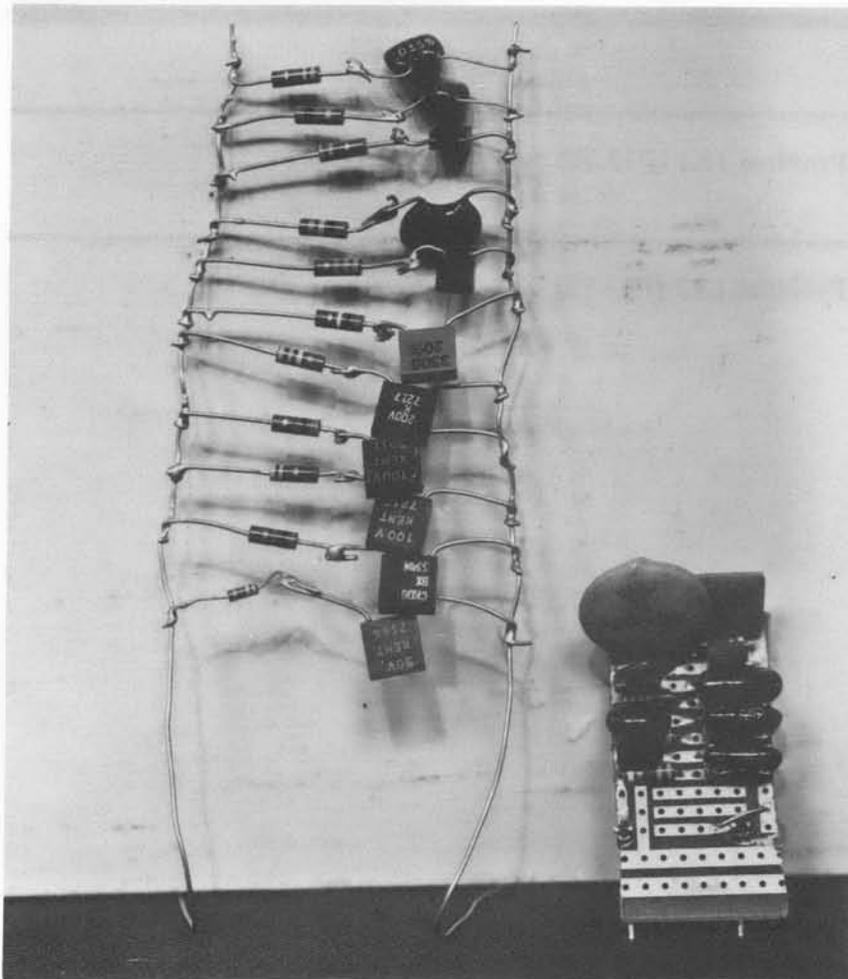


Viewgraph 13.5





Demonstration Photograph
13.1 Slow-roll-off compensation demonstration



Demonstration Photograph
13.2 Slow-roll-off network

Comments

Our discussion of minor-loop compensation tailored to specific applications is continued. We find that if a zero is added to the open- (major-) loop transmission at an appropriate frequency, acceptable stability can be maintained when an additional pole (for example, from capacitive loading) occurs. This type of compensation requires specific information concerning the location of the additional pole.

Conversely, compensation that rolls off more slowly than $1/s$ is advantageous when it is expected that the additional pole will be located over a range of frequencies.

Reading

Textbook: Sections 13.3.4 and 13.3.5.

Problems

Problem 13.1 (P13.10)

Problem 13.2 (P13.11)

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