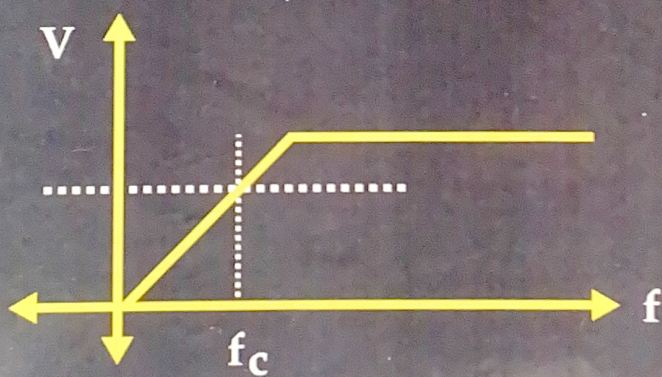
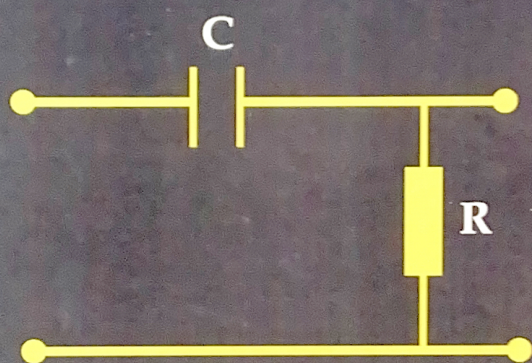


Electronically Tunable Current Mode Filters



Dhananjay D. Mulajkar

High performance active filters have received much attention. In filter circuit designs, current mode filters are becoming popular since they have many advantages compared with their voltage mode counter parts. Current mode filters have large dynamic range, higher bandwidth, greater linearity, simple circuitry, low power consumption. Designs of current mode filters employing active devices such as Operational Amplifiers (OA), Operational Trans-conductance Amplifiers (OTA) and second generation current conveyors (CCIIS) have been reported in the literature. These filters do not need to employ additional passive elements, as a result require less chip area for integrated circuit implementation.

The pole of op-amp can be used to design active filters with only resistors. This book contains second and third order active-R filters designed and realized using internally compensated Operational Amplifiers and dual current output Operational Transconductance Amplifier. The circuits have low passive sensitivities and provides electronically tuning capability of the filter characteristics.



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