

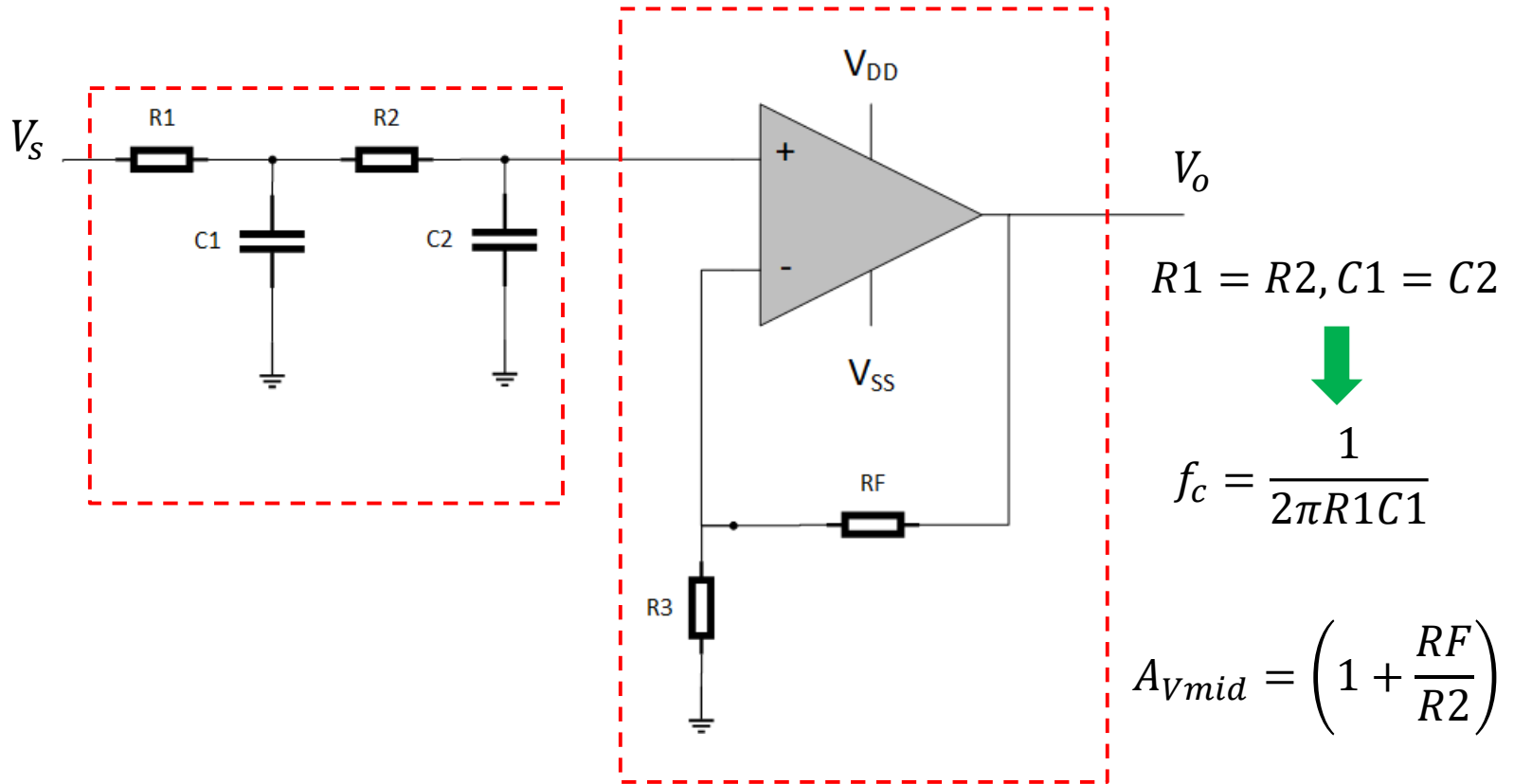
ELM320 ANALOG ELEKTRONİK

Ders Materyali

İŞLEMSEL YÜKSELTEÇ
UYGULAMALARI - SÜZGEÇLER

İŞLEMSEL YÜKSELTEÇ UYGULAMALARI - SÜZGEÇLER

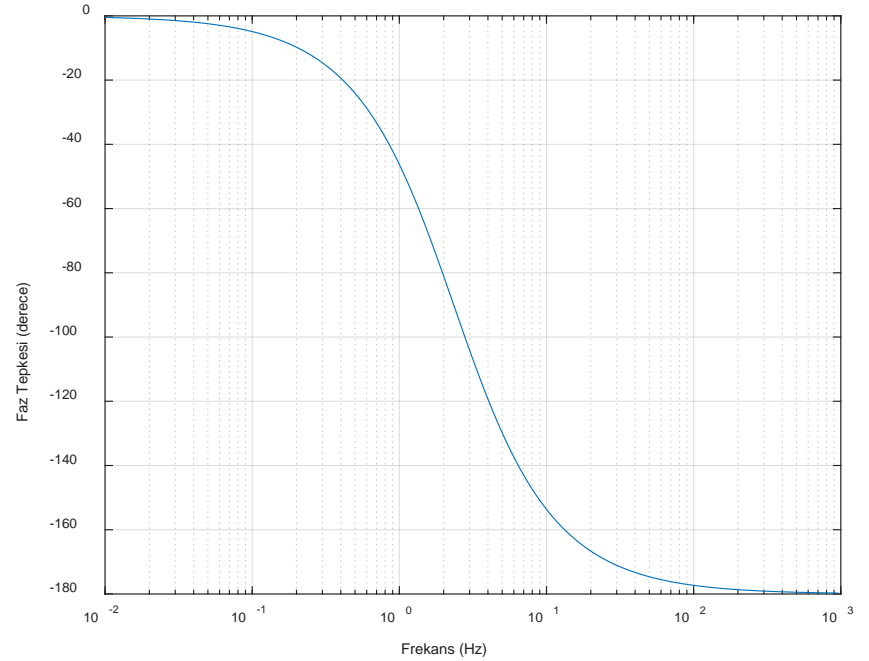
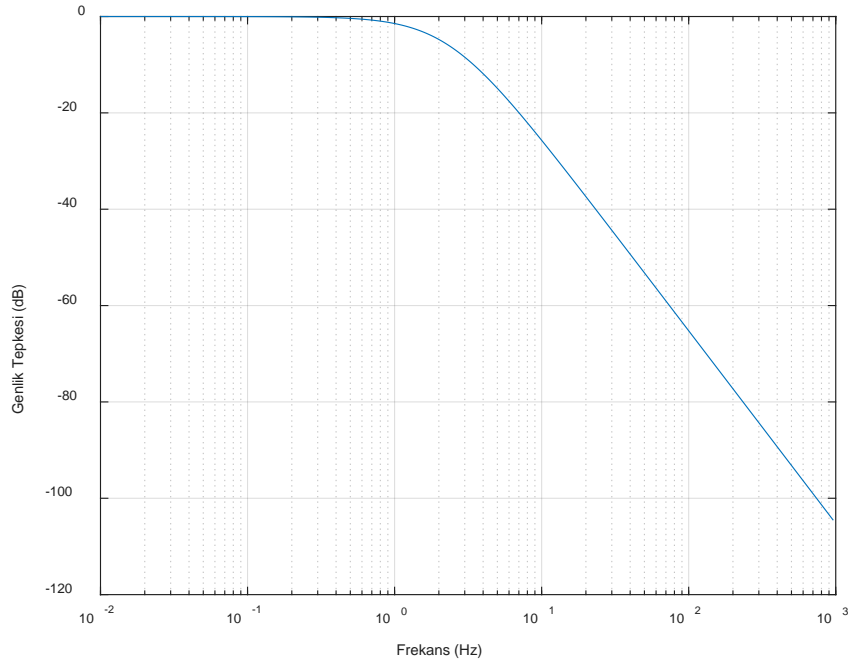
2. derece alçak geçirgen aktif süzgeç:



İŞLEMSEL YÜKSELTEÇ UYGULAMALARI - SÜZGEÇLER

2. derece alçak geçiren aktif süzgeç:

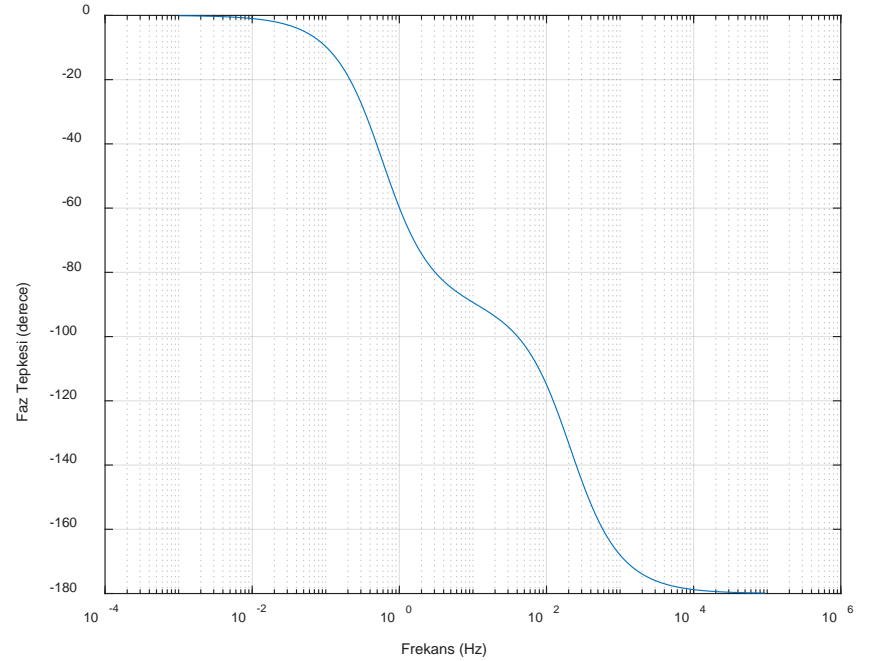
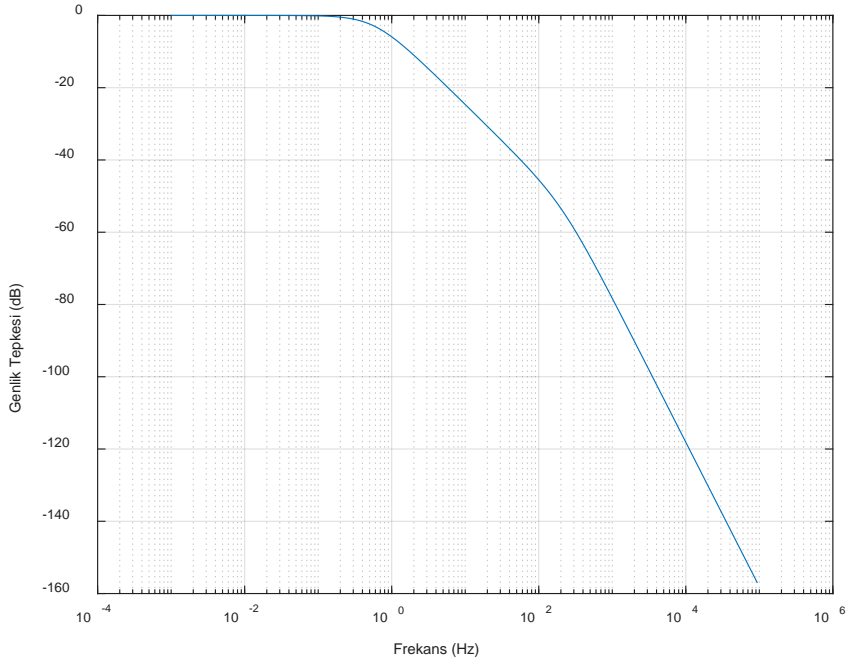
$$R1 = 1k\Omega, \quad R2 = 1k\Omega, \quad C1 = 68\mu F, \quad C2 = 68\mu F$$



İŞLEMSEL YÜKSELTEÇ UYGULAMALARI - SÜZGEÇLER

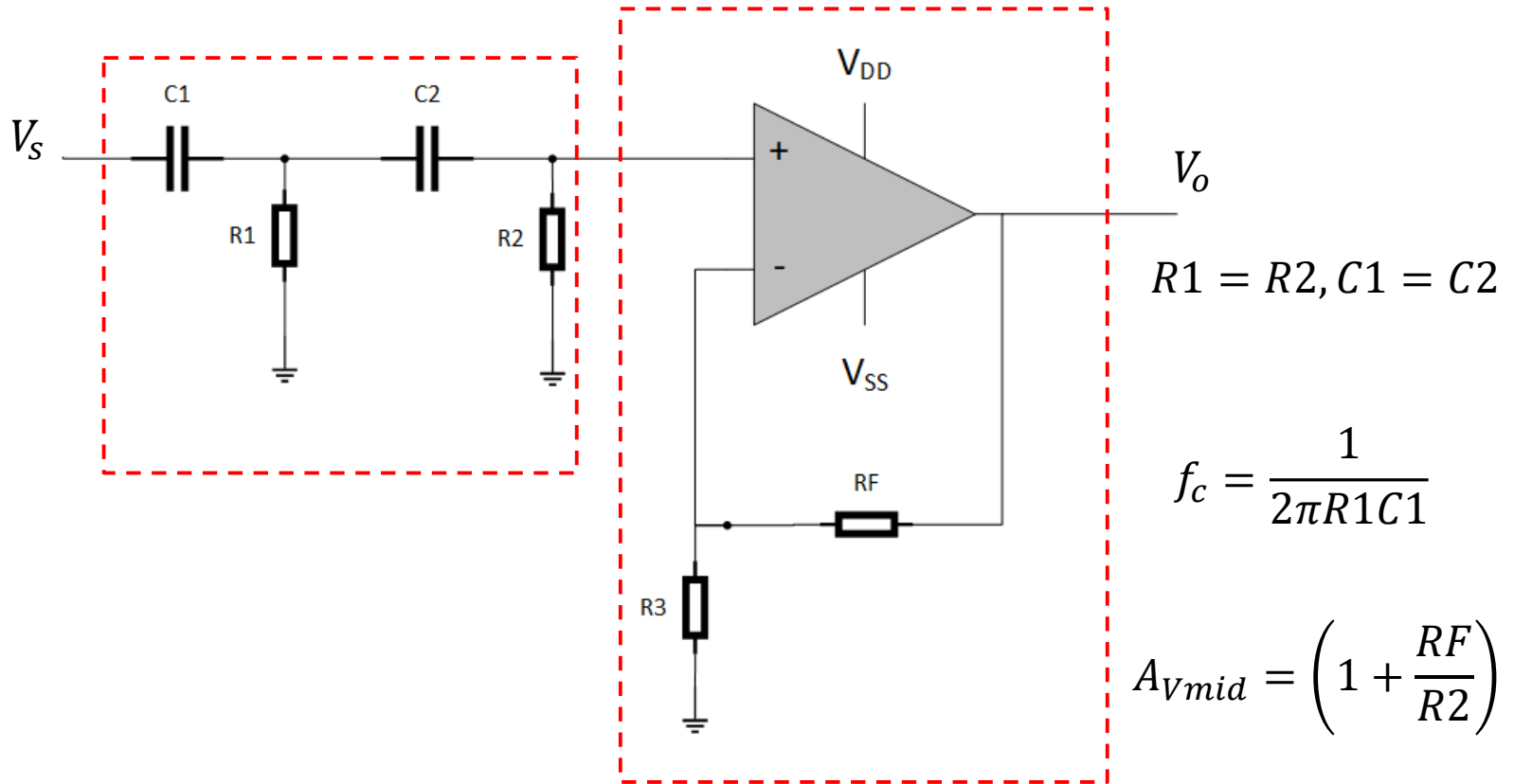
2. derece alçak geçirgen aktif süzgeç:

$$R1 = 1k\Omega, \quad R2 = 3k\Omega, \quad C1 = 1\mu F, \quad C2 = 68\mu F$$



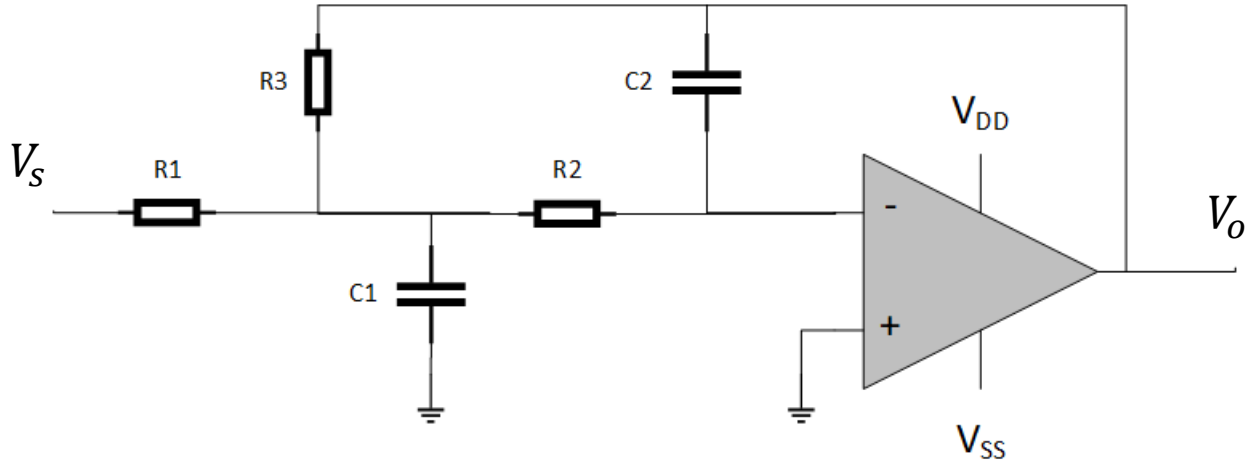
İŞLEMSEL YÜKSELTEÇ UYGULAMALARI - SÜZGEÇLER

2. derece yüksek geçirgen aktif süzgeç:



İŞLEMSEL YÜKSELTEÇ UYGULAMALARI - SÜZGEÇLER

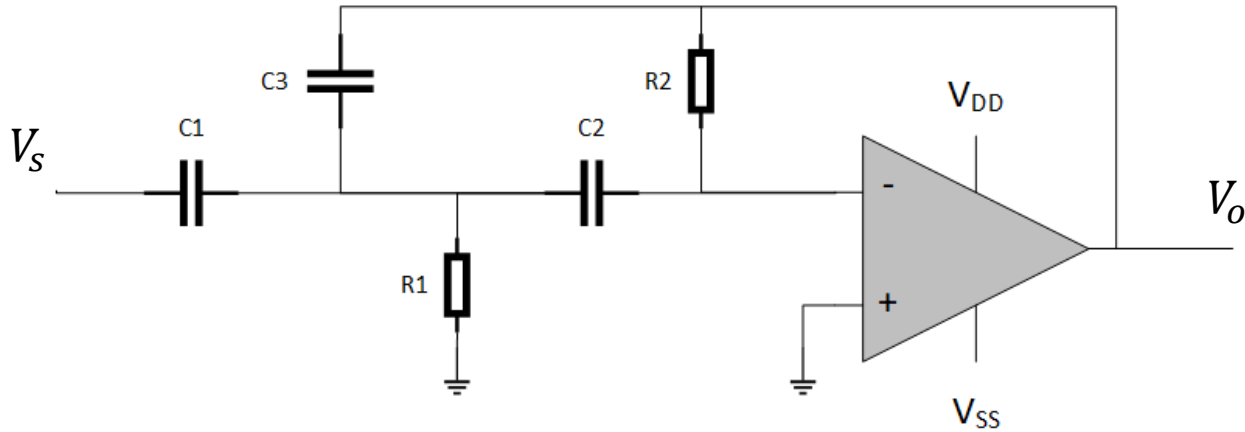
Çoklu geribesleme tipi alçak geçirgen süzgeç:



$$H(s) = \frac{1}{s^2 + \frac{1}{C1} \left(\frac{1}{R1} + \frac{1}{R2} + \frac{1}{R3} \right) s + \frac{1}{C1C2R2R3}}$$

İŞLEMSEL YÜKSELTEÇ UYGULAMALARI - SÜZGEÇLER

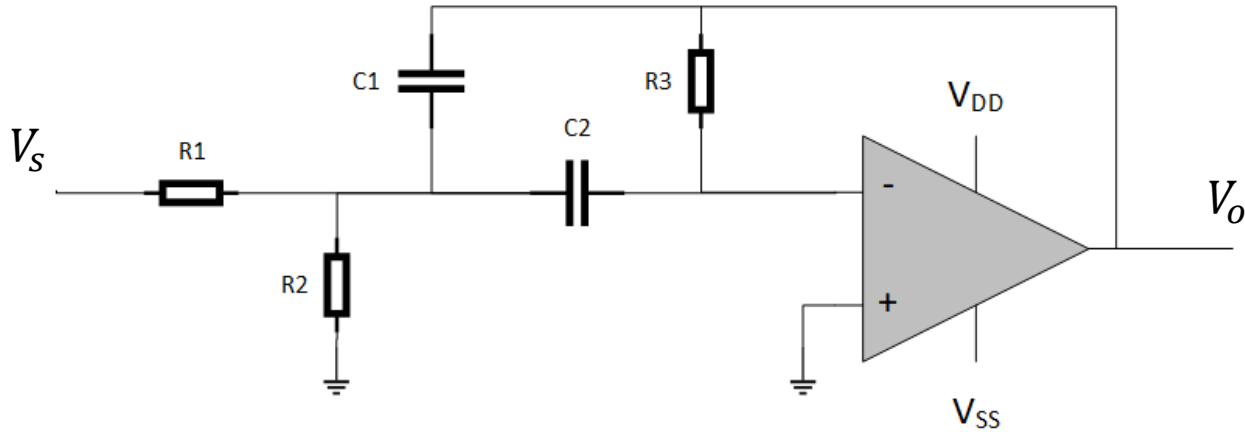
Çoklu geribesleme tipi yüksek geçirgen süzgeç:



$$H(s) = \frac{-\frac{C1}{C3}s^2}{s + \left(\frac{C1 + C2 + C3}{R2C2C3}\right)s + \frac{1}{R1R2C2C3}}$$

İŞLEMSEL YÜKSELTEÇ UYGULAMALARI - SÜZGEÇLER

Çoklu geribesleme tipi band geçiren süzgeç:



$$H(s) = \frac{-\frac{1}{R1C1}s}{s^2 + \left(\frac{1}{R3C2} + \frac{1}{R3C1}\right)s + \frac{1}{R3C1C2}\left(\frac{1}{R1} + \frac{1}{R2}\right)}$$

KAYNAKLAR

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