

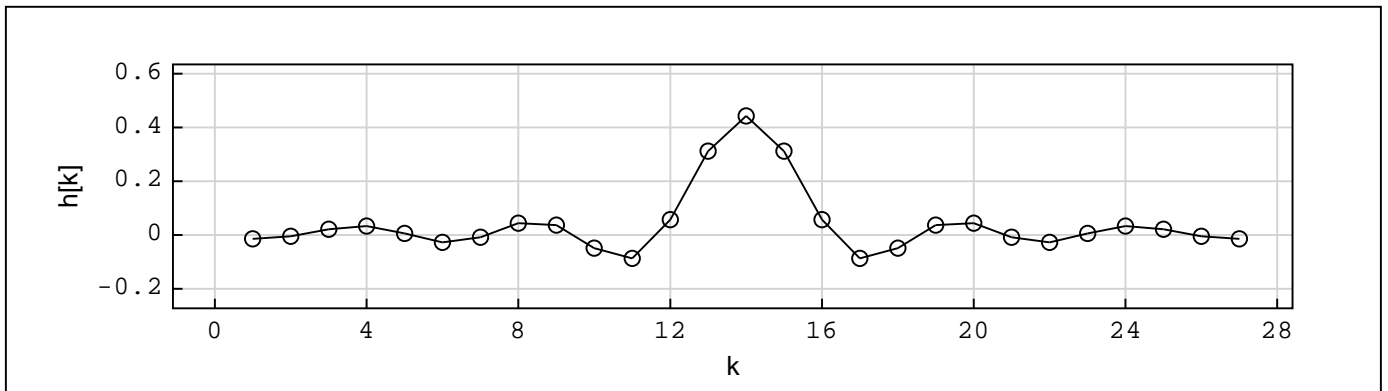
```
bands := stack(1, 0)      freq := stack(0, 0.2, 0.25, 0.5)      Rp := 1      Rs := 40
```

$$\Delta_p := 0.5 \cdot \left(1 - 10^{-\frac{Rp}{20}}\right) = 0.0544 \quad \Delta_s := 10^{-\frac{Rs}{20}} = 0.01$$

$$n := \text{round}\left(\frac{-10 \cdot \log_{10}(\Delta_p \cdot \Delta_s) - 13}{14.6 \cdot 0.05}\right) = 27 \quad \text{verr} := \text{stack}\left(1, \frac{\Delta_p}{\Delta_s}\right) = \begin{bmatrix} 1 \\ 5.4375 \end{bmatrix}$$

```
h := remez(freq, bands, verr, n)
```

```
hplot := augment([1..n], h)
```

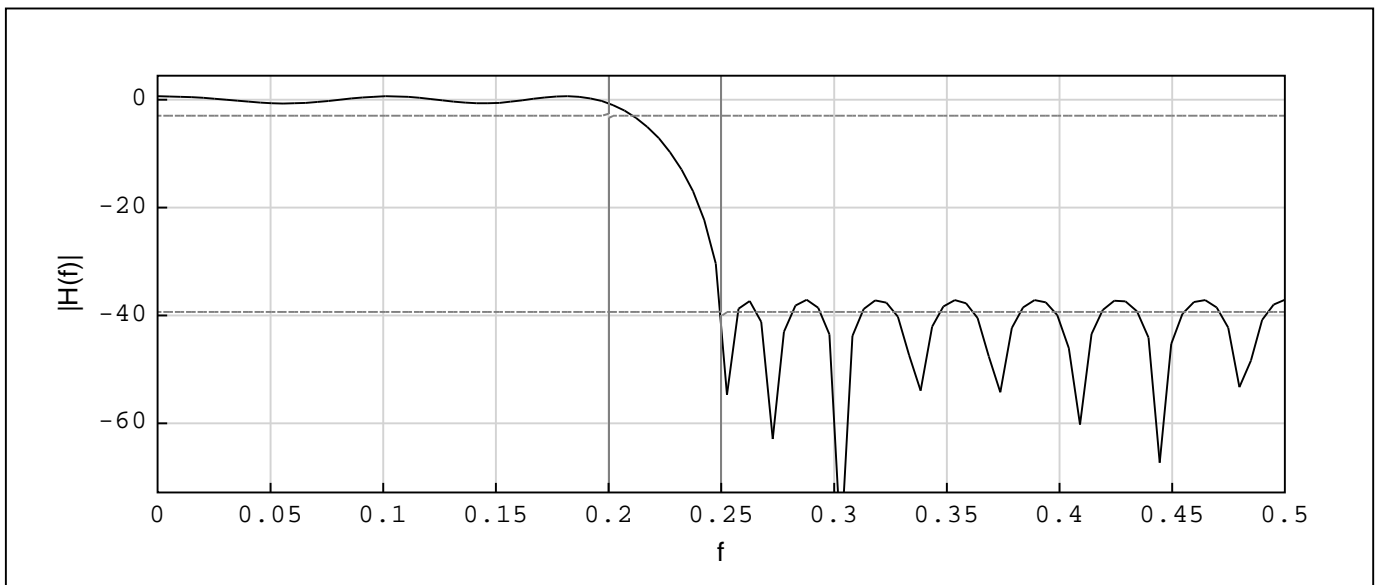


hplot

$$H(x) := \sum_{k=1}^n h_k \cdot \exp(-i \cdot 2 \cdot \pi \cdot x \cdot k)$$

$$m1(x, y) := \frac{x - \text{freq}_2}{y + 3} \quad m2(x, y) := \frac{x - \text{freq}_3}{y + 40}$$

$$Hplot(x) := 20 \cdot \log_{10}(|H(x)|)$$



```
{ Hplot(x)
  m1
  m2
```