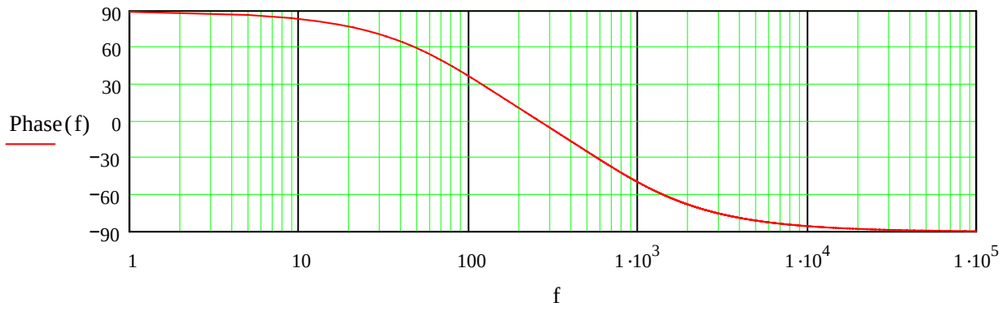
Bandpass

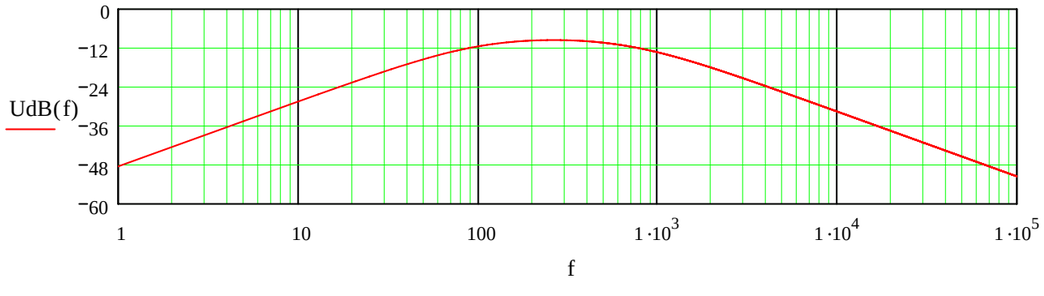
$R_1 := 200\Omega \quad L_1 := 0.12H \quad f := 1, 5 .. 100000 \quad \omega j(f) := 2\cdot\pi\cdot f\cdot\frac{1}{s}$

$$Gain(f) := \frac{1}{3 + j\cdot\left(\frac{\omega j(f)\cdot L_1}{R_1} - \frac{R_1}{\omega j(f)\cdot L_1}\right)}$$

$U(f) := |Gain(f)| \qquad Phase(f) := arg(Gain(f))\cdot\frac{180}{\pi}$

$UdB(f) := 20\cdot\log(U(f))$





a := 1000

Given

$U(a) = \frac{1}{\sqrt{2}} \qquad fg := Suchen(a) \qquad fg =$