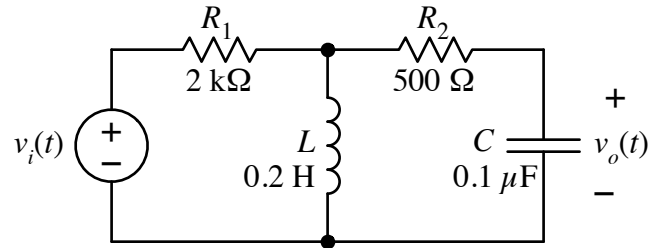For the second-order filter circuit shown at right, calculate the transfer function (in symbols). (Yes, it is a bit messy.) What type of filter is it?

R_1 2 kΩ

R_2 500 Ω

$v_i(t)$ (+ −)

L 0.2 H

C 0.1 μF

$v_o(t)$ + −

For the component values given, calculate f_o, Q_P, G_o, and the bandwidth (in Hz). (Oops, there's a clue in there.)

$T(s) =$ _____

type: _____

$f_o =$ _____; $Q_P =$ _____; $G_o =$ _____; $BW =$ _____