Element values of modules 1, 2 and 3

L1 = 200 uH

R7 = 510 mΩ

C4 = 500 pF

R1 = 100 kΩ

R2 = 1kΩ

R3 = 470 Ω

C3 = 100 nF

R8 = 10 kΩ

R5 = 500 Ω

R4 = 1 kΩ

C2 = 100 nF

C1 = 0 (i.e., open)

Apply an amplitude-modulated signal of 1V with a frequency range of (5kHz - 500 kHz) to the detection circuit.