

osc_sinusoidal_2.sqproj

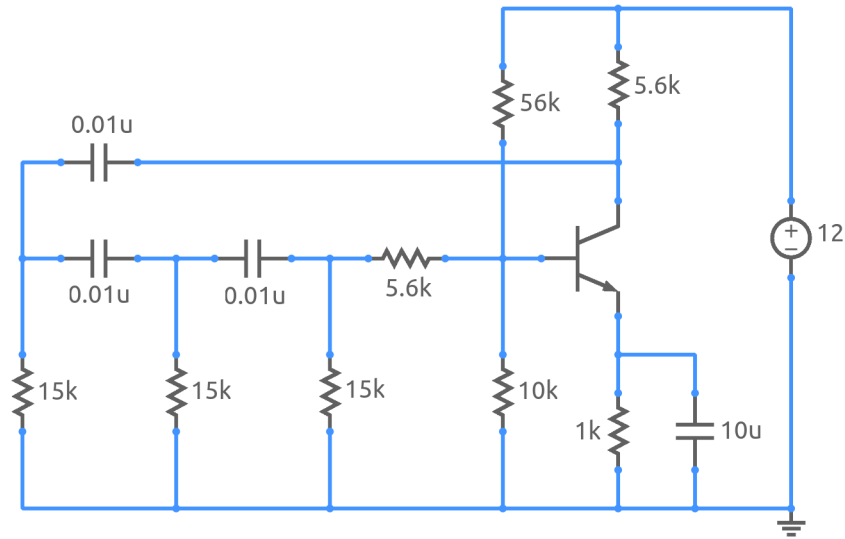


Figure 1: A sinusoidal oscillator circuit.

Exercise Set

1. Using the Barkhausen criterion, find the oscillation frequency and the minimum amplifier gain.
2. Simulate the circuit and check your results.

References

1. L.S. Bobrow, *Fundamentals of Electrical Engineering*, Oxford University Press, 2009.
2. S. Franco, *Design with Operation Amplifiers and Analog Integrated Circuits*, McGraw-Hill, 1998.
3. J. Millman and A. Grabel, *Microelectronics*, McGraw-Hill, 1988.
4. A.S. Sedra, K.C. Smith, and A..N. Chandorkar, *Microelectronic Circuits*, Oxford University Press, 2004.