

TITLE: Emitter Follower Voltage Regulator eSIM

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ABSTRACT:

The **Emitter Follower Voltage Regulator** is a simple and efficient circuit used for voltage regulation. It employs an **NPN transistor** in an emitter follower configuration, where a **Zener diode** provides a stable reference voltage at the base. The regulated output voltage is slightly lower than the Zener voltage due to the **base-emitter drop** ($\approx 0.7V$). This circuit offers **low output impedance, improved voltage stability, and better load regulation**. Simulating this regulator in **eSim** allows for performance analysis, including **voltage regulation, transient response, and efficiency evaluation**, making it a useful educational and practical circuit.

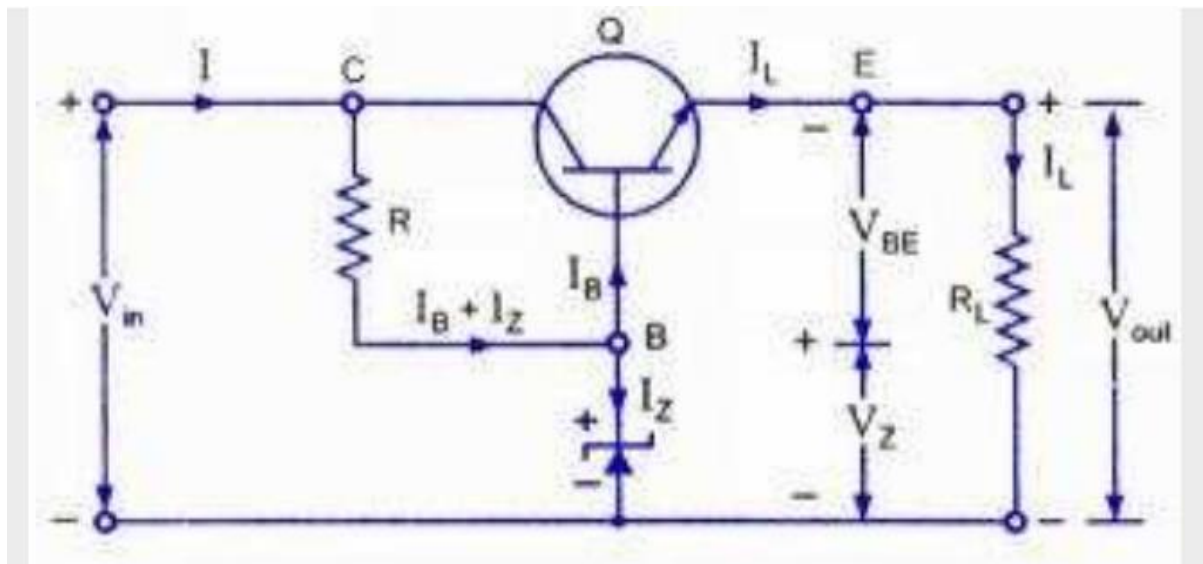


Fig 1: This circuit illustrates the Emitter follower regulator

JOURNAL/PUBLICATION DETAILS:

TITLE OF THE PAPER: Analysis and Design of Emitter Followers at High Frequencies

NAME OF THE JOURNAL/PUBLICATION: [IEEE Transactions on Circuit Theory](#)

AUTHOR: [J. Kozikowski](#)

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