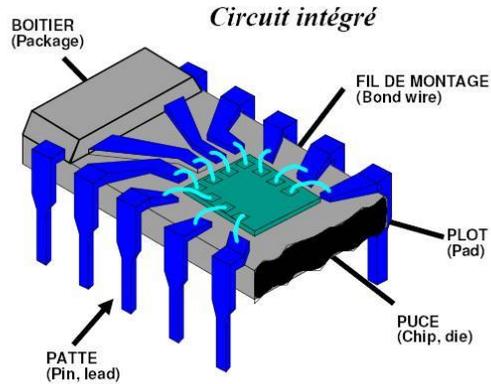
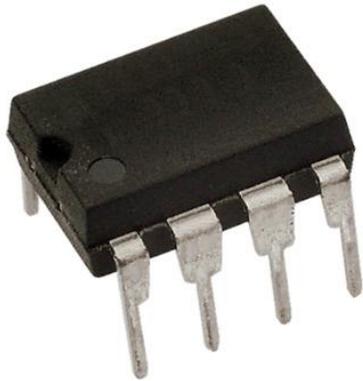
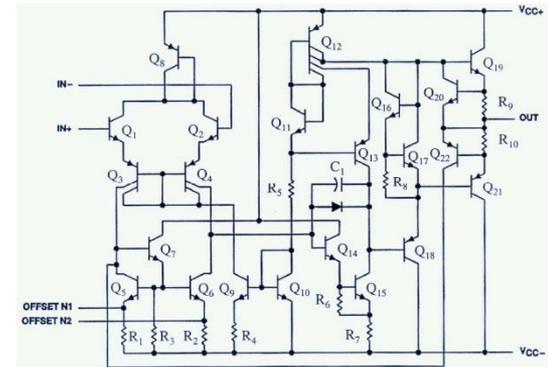
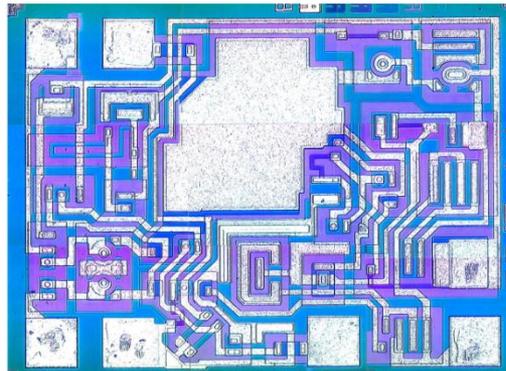
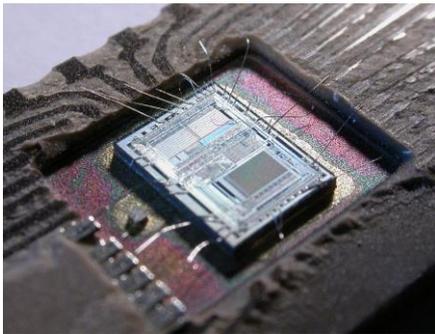


Amplificateur opérationnel réel

✓ Composant électronique



✓ Circuit intégré dans le silicium

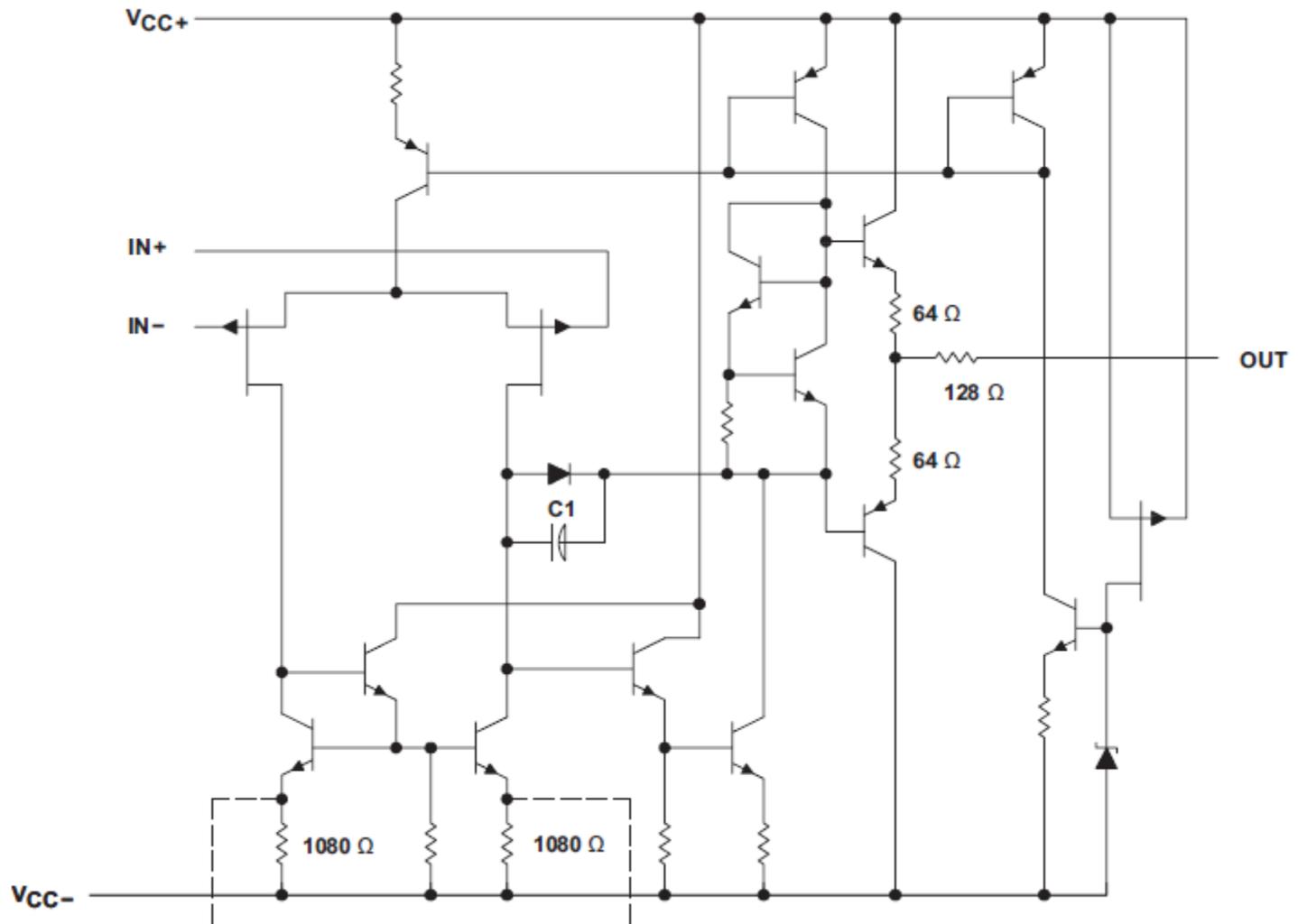


Amplificateur opérationnel réel

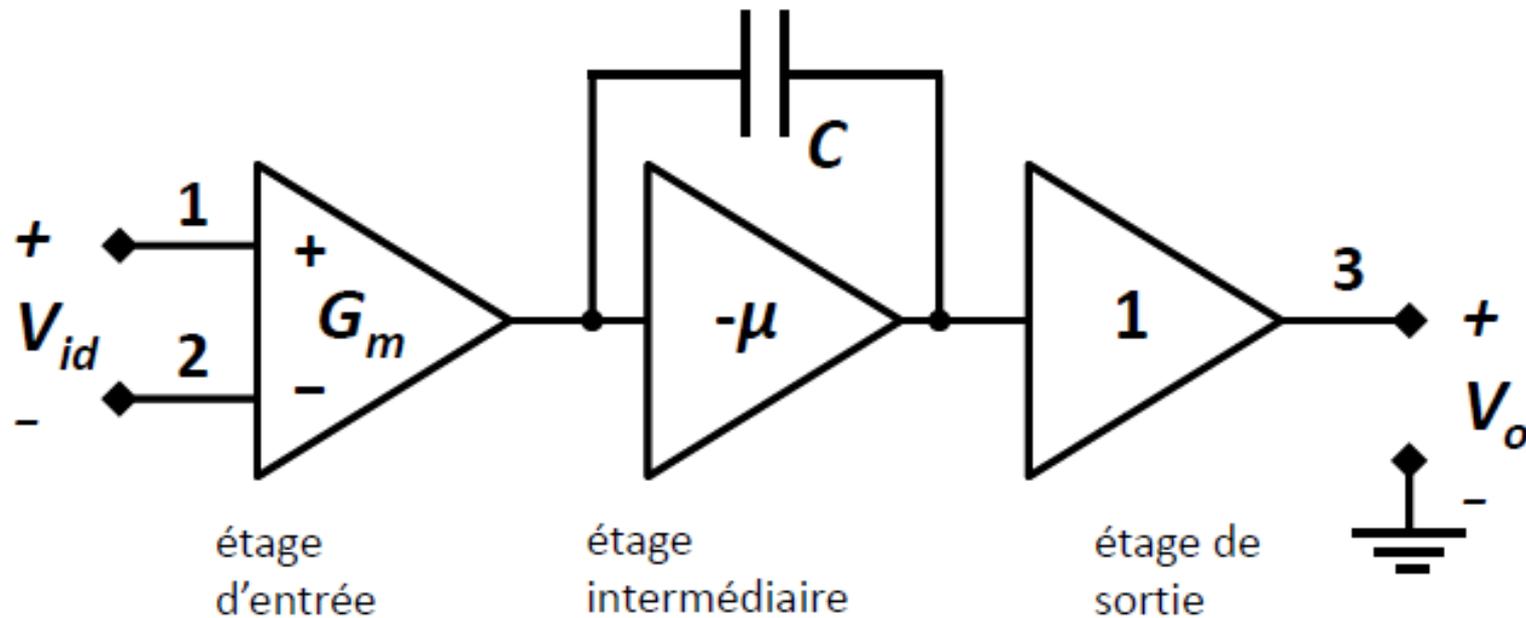
Illustration : TL082

- Introduction et description générale du TL 082
- Imperfections statiques
 - Courants de polarisation et de décalage
 - Tension de décalage
 - Amplification et taux de réjection en mode commun
- Imperfections dynamiques
 - Réponse fréquentielle
 - Influence sur le fonctionnement en boucle fermée
 - Régime des grands signaux : slew rate
 - ❖ Origine
 - ❖ Définition
 - ❖ Influence

Schematic (Each Amplifier)

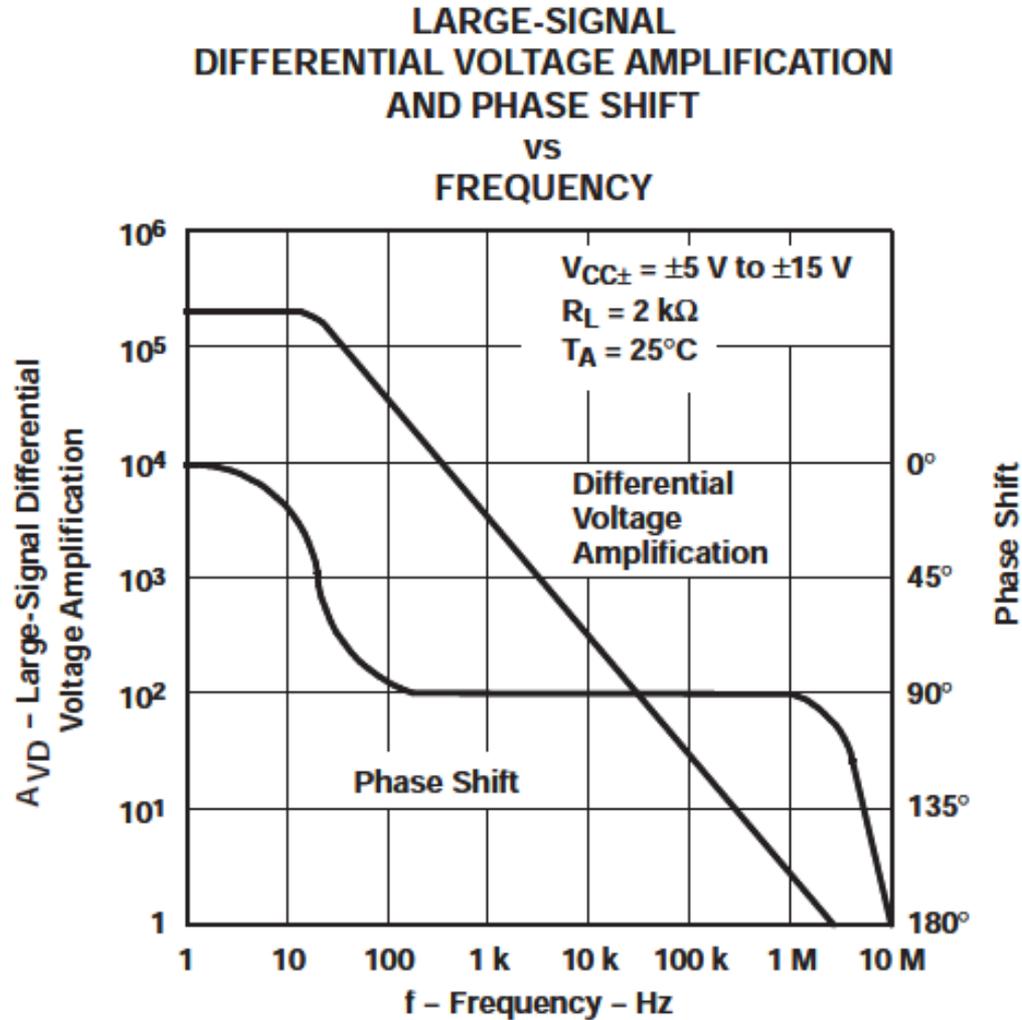


Modèle petit signal de l'ampli-op



Étage intermédiaire: amplificateur inverseur à très grand gain de tension ($-\mu$) avec un condensateur dans la boucle de rétroaction pour la compensation de l'ampli-op

Produit Gain Bande-passante Fréquence de transition



Régime des grands signaux

SR Slew rate	The average time rate of change of the closed-loop amplifier output voltage for a step-signal input.
t_r †Rise time	The time required for an output voltage step to change from 10% to 90% of its final value.

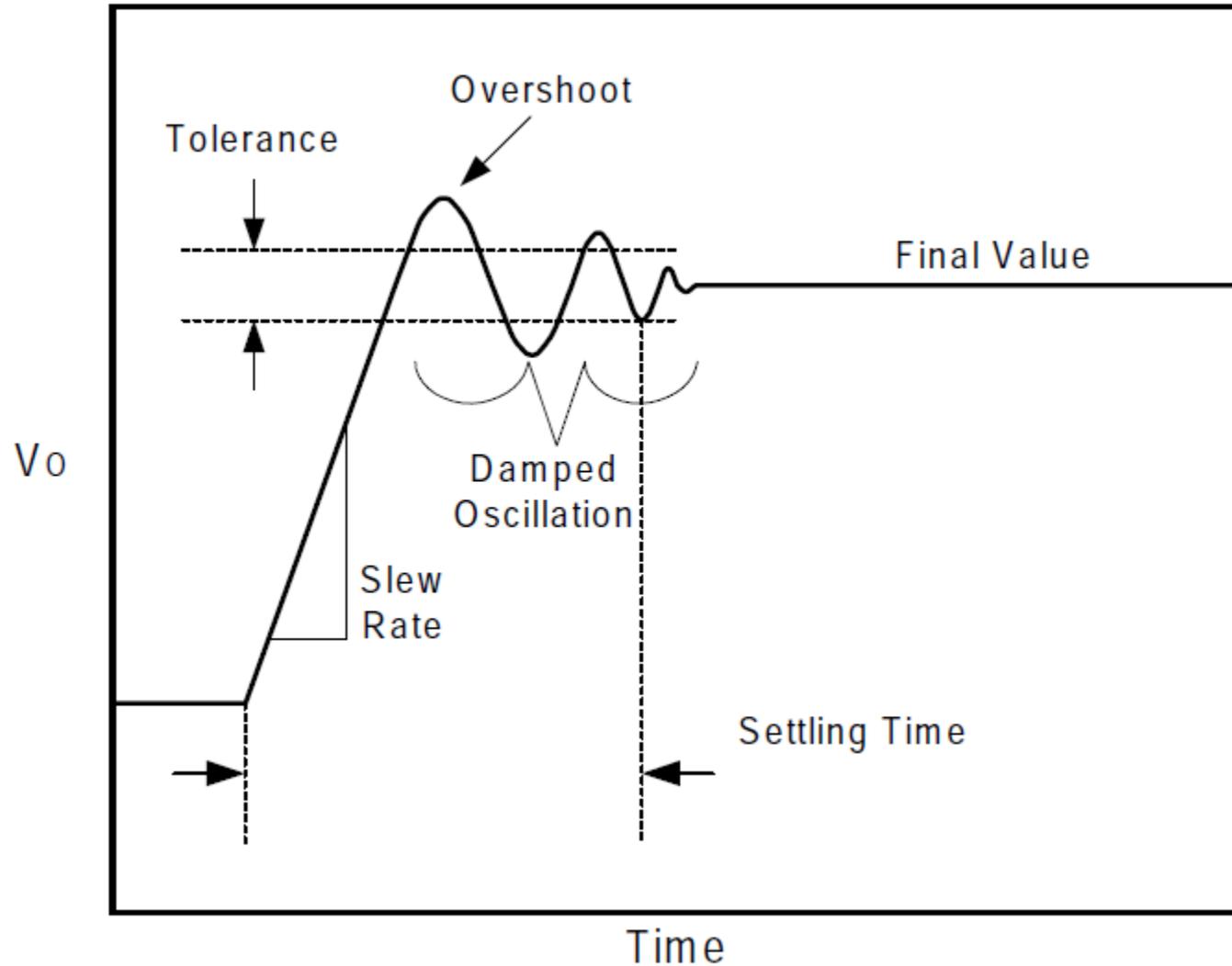
Settling Time

It takes a finite time for a signal to propagate through the internal circuitry of an op amp. Therefore, it takes a certain period of time for the output to react to a step change in the input. Also the output normally overshoots the target value, experiences damped oscillation, and settles to a final value. Settling time, t_s , is the time required for the output voltage to settle to within a specified percentage of the final value given a step input. Figure 19 shows this graphically.

Settling **time** is the **elapsed time** from input application until the output arrives at and remains within a specified error band around the final value

Slew rate et settling time

Vitesse de derive et temps d'établissement



Slew rate Settling time TL 082

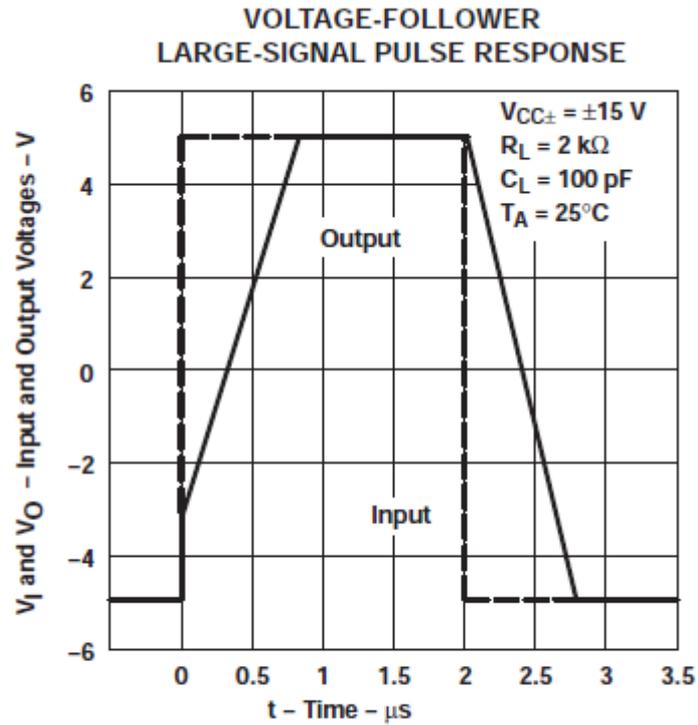


Figure 18.

