

WHAT IS “THE EMITTER CURRENT CROWDING EFFECT”? TO EXPLAIN AND DISCUSS

射極電流擁擠效應

授課老師: 鄒文正 老師

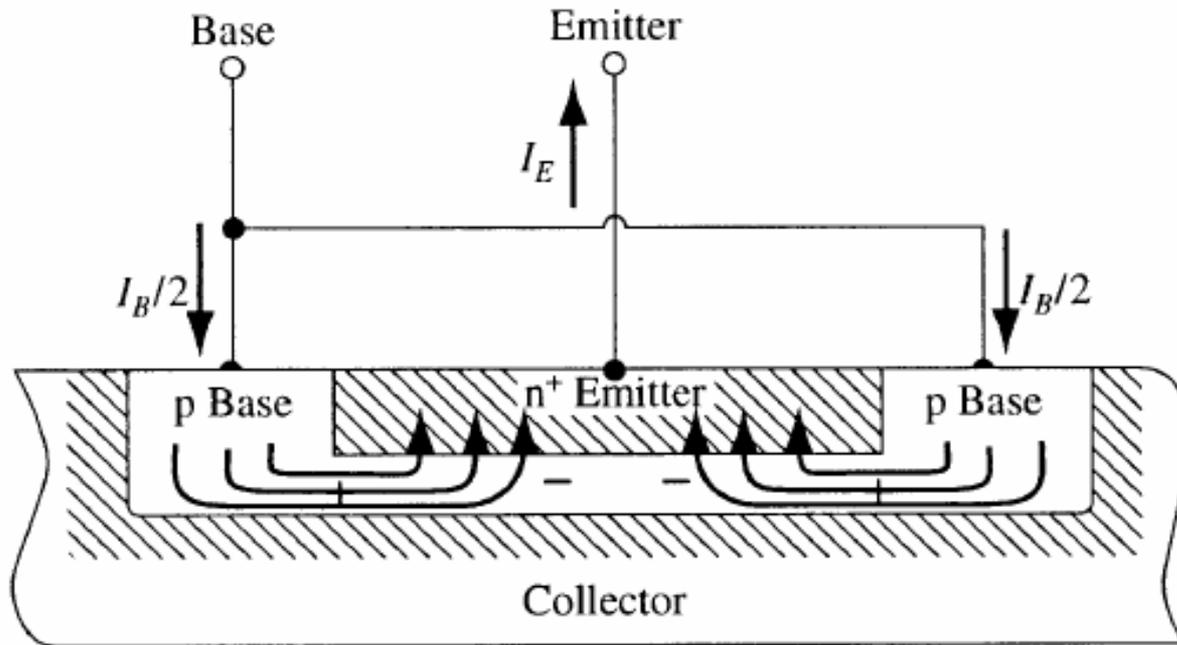
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學號: MA4L0108

Outline

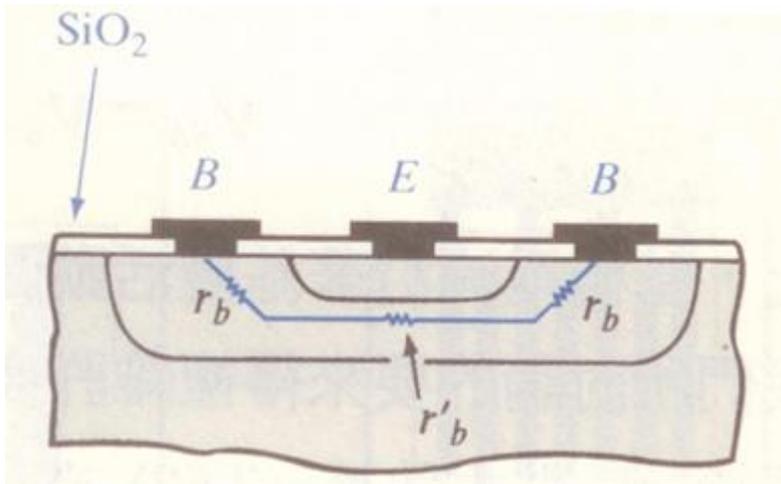
- Reason(原因)
- Influences(影響)
- Improve(改善方法)
- Reference(參考資料)

Reason(原因)

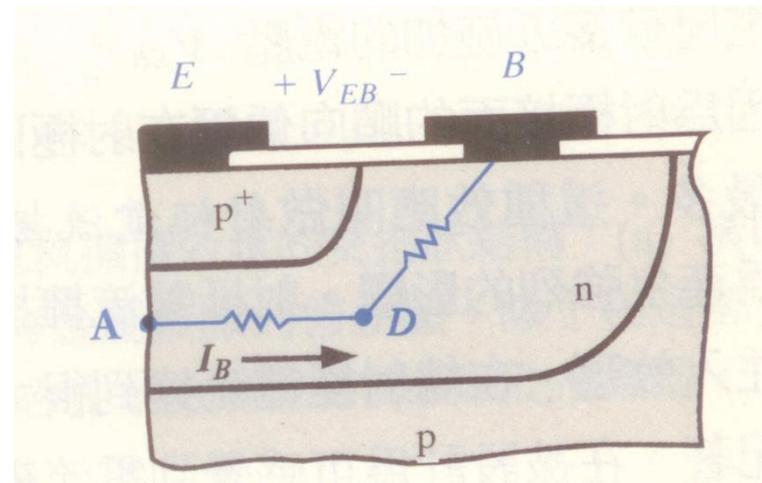


npn 電晶體基極電流橫向分佈示意圖

Influences(影響)

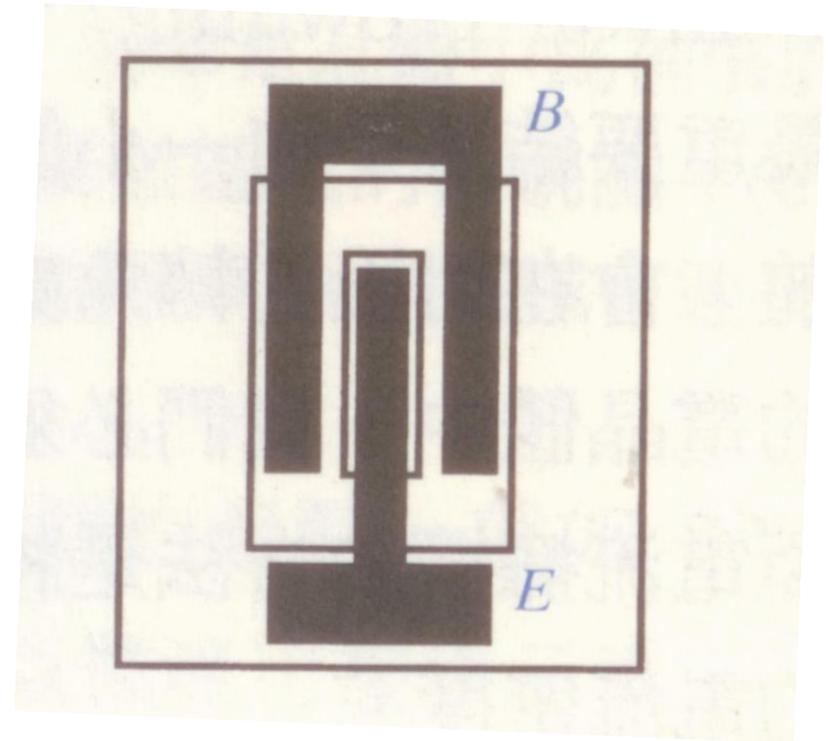
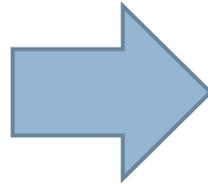
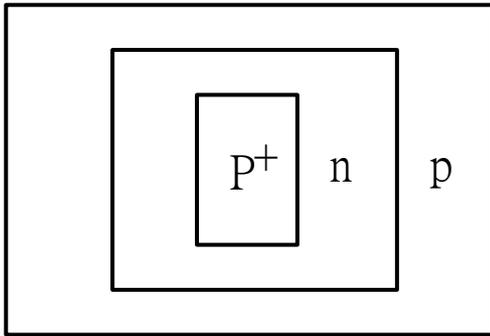
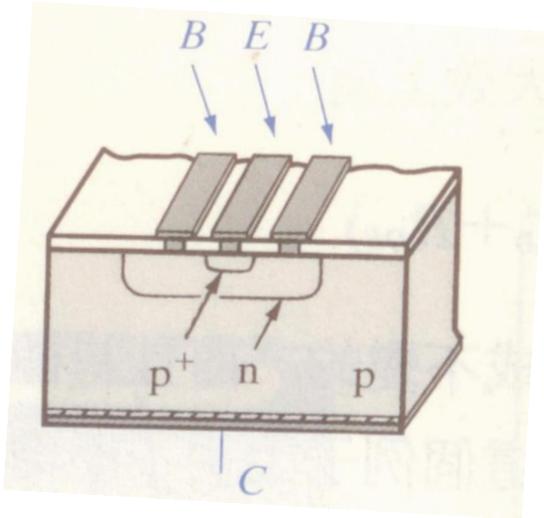


基極電阻



散佈電阻在基極活動區的放大圖

Improve(改善方法)



指叉狀電極

Reference(參考資料)

- “半導體元件物理與製程技術” 施敏 著
- “半導體元件物理” BEN .STREETMAN & SANJAY BANERJEE 著
- “VBIC 模型應用於不同尺寸異質接面雙載子電晶體之研究” 徐慧芬 著
- “0.25um BCD 製程之BJT元件直流特性分析”-清華大學碩博士論文- 李建融 著

**Thank you for
listening**

