



勢流科技

SIEMENS

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Flotherm XT Two-Resistor 設定方法

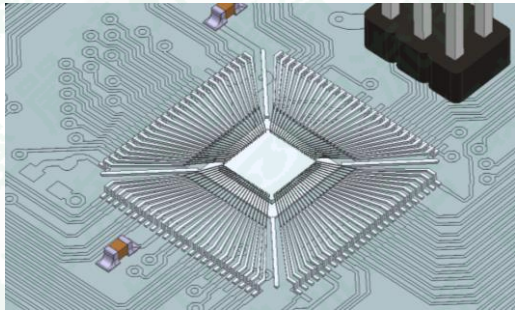


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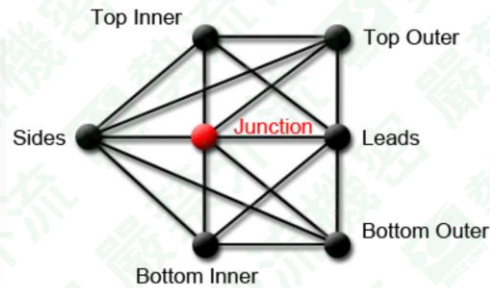


封裝元件模型介紹

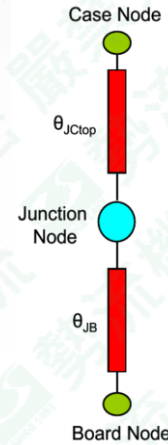
- Flotherm XT對於封裝可利用四種方法建立模型，其模擬精準度由高至低如下圖，對於一般系統(e.g., NB, SERVER)的模擬，常見封裝元件的data sheet為Two-Resistor(2R， R_{j-c} and R_{j-b})，本次內容針對2R設定進行說明



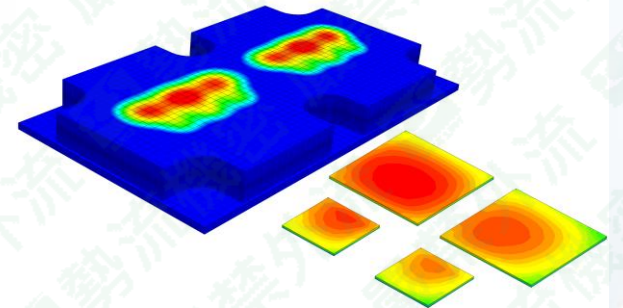
Detail model



Network Assembly



2R model



volume heat source



2R model

- Flotherm XT 2R模型使用Network Assembly進行建立，流程如下圖

1. 對元件模型點選network assembly

2. Node/Resistance Table

3. Node/Resistance Table

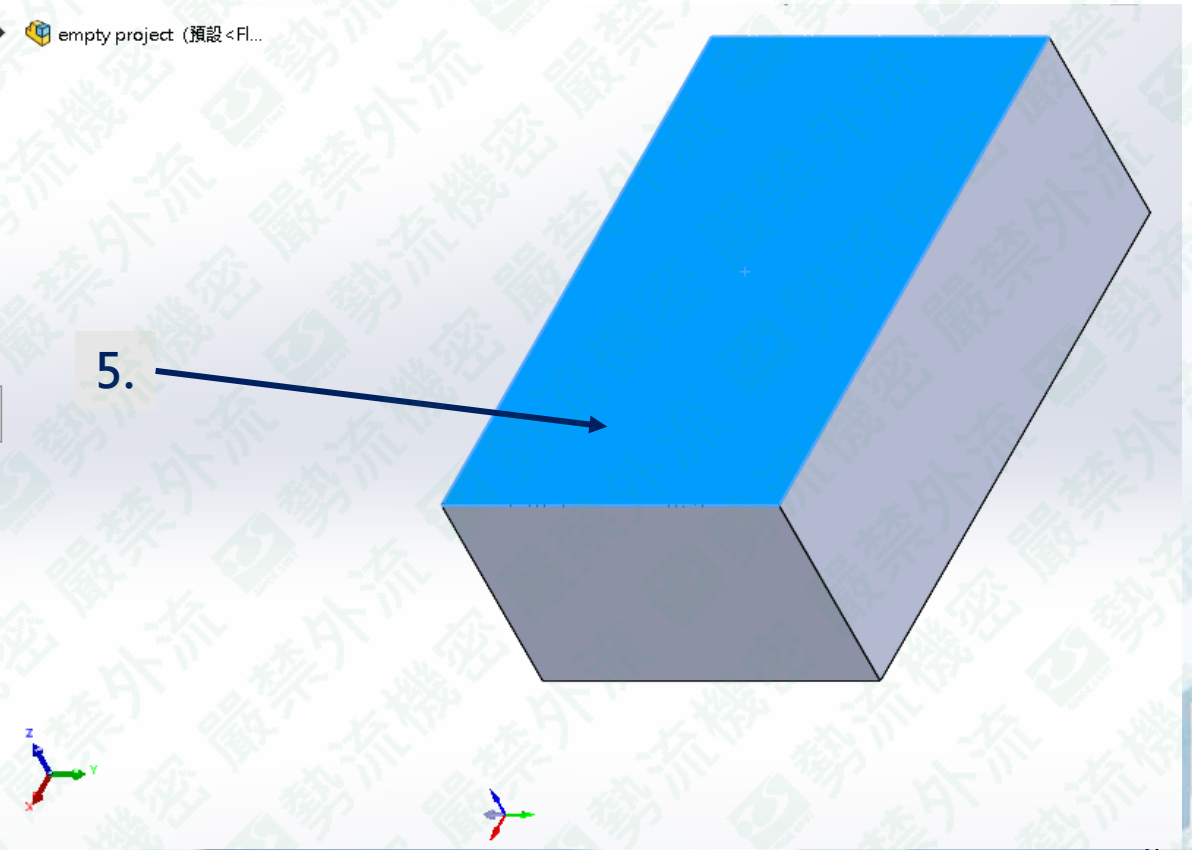
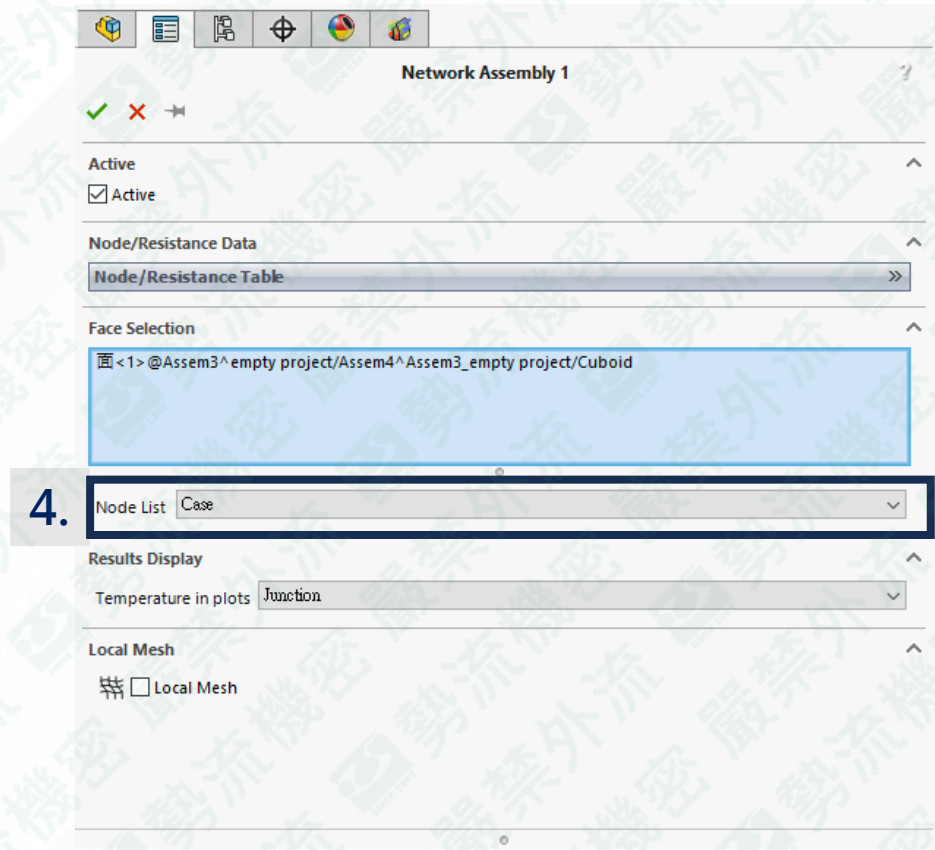
| | | Capacitance | Power | Thermal Attribute | Goal | 1 | 2 | 3 |
|---|----------|-------------|----------|-------------------|------------|------------|---|---|
| 1 | Junction | 0.0000 J/K | 6.0000 W | ∅ | Monitoring | | | |
| 2 | Case | 0.0000 J/K | 0.0000 W | ∅ | Monitoring | 1.0000 K/W | | |
| 3 | Board | 0.0000 J/K | 0.0000 W | ∅ | Monitoring | 2.0000 K/W | | |

設定Junction to Case與Junction to board的熱阻



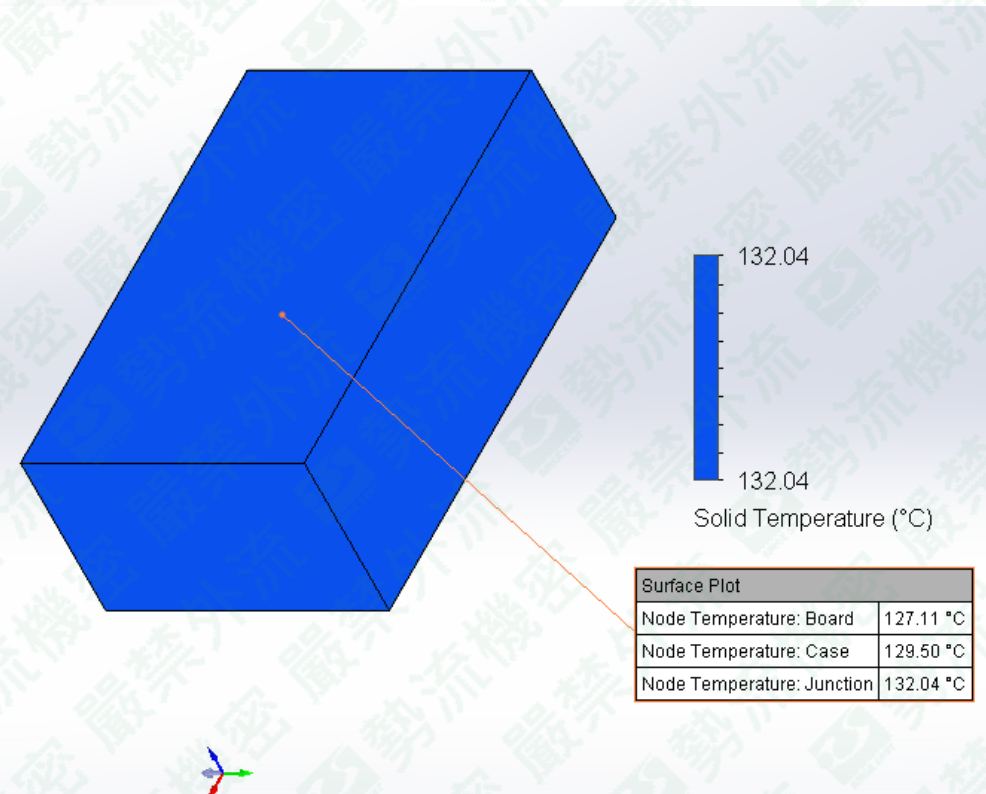
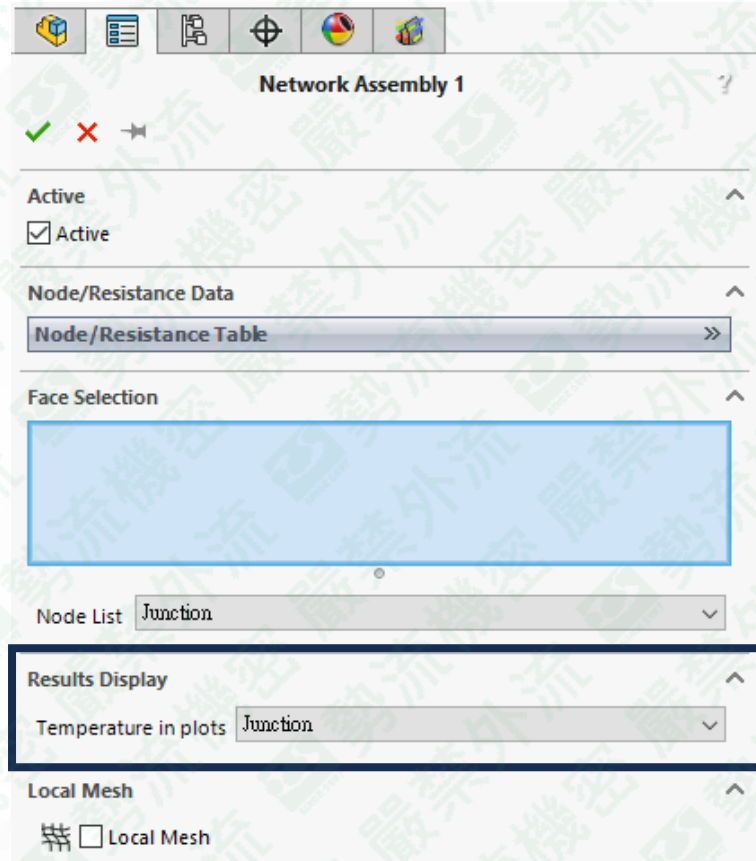
2R model

- 在network assembly底下設定case與board在模型上的面，其操作步驟如下圖

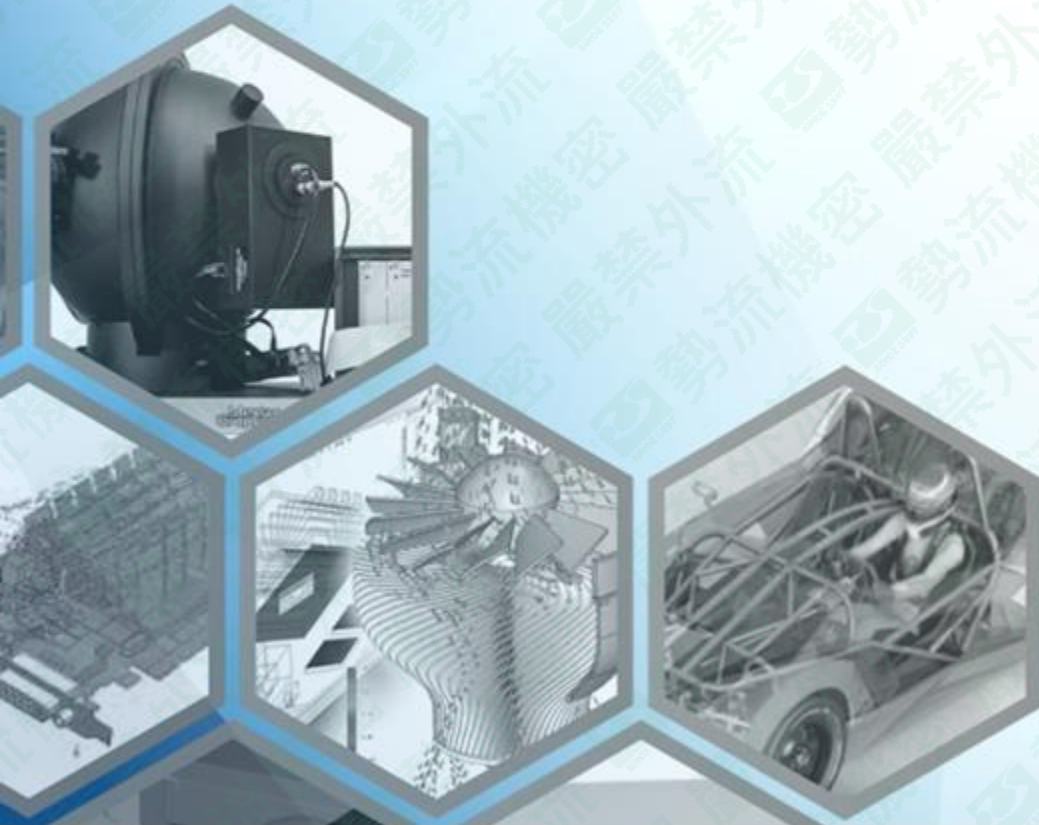


後處理結果

- 在後處理顯示上，元件表面會依照”result display”設定的面顯示溫度值，使用Plot Probe即可得到三個面的溫度



Thank you for your attention.



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