

### 薄膜電容器焊接指南 Soldering Guidelines for Film Capacitors

聚丙烯膜電容器對熱特別敏感（聚丙烯膜的熔點為 160°C ~ 170°C），波峰焊可能具有破壞性，尤其是對於小型聚丙烯膜電容器（引線間距為 5 mm 至 15 mm），焊接過程中必須非常小心。IEC 出版 61760-1 第 2 版中的波峰焊接曲線可作為焊接指南。（見圖 1）

Polypropylene capacitors are especially sensitive to heat (the melting point of polypropylene is 160 – 170°C).

Wave soldering can be destructive, especially for mechanically small polypropylene capacitors (with lead spacing of 5 – 15 mm), and great care must be taken during soldering. In general, the wave soldering curve from IEC Publication 61760-1 Edition 2 serves as a solid guideline for successful soldering. (See Figure 1)

通孔的薄膜電容器不建議採用回流焊。將電容器暴露在超過上述建議限值可能會導致電容器退化或永久性損壞。

Reflow soldering is not recommended for through-hole film capacitors. Exposing capacitors to a soldering profile in excess of the recommended limits may result in degradation or permanent damage to the capacitors.

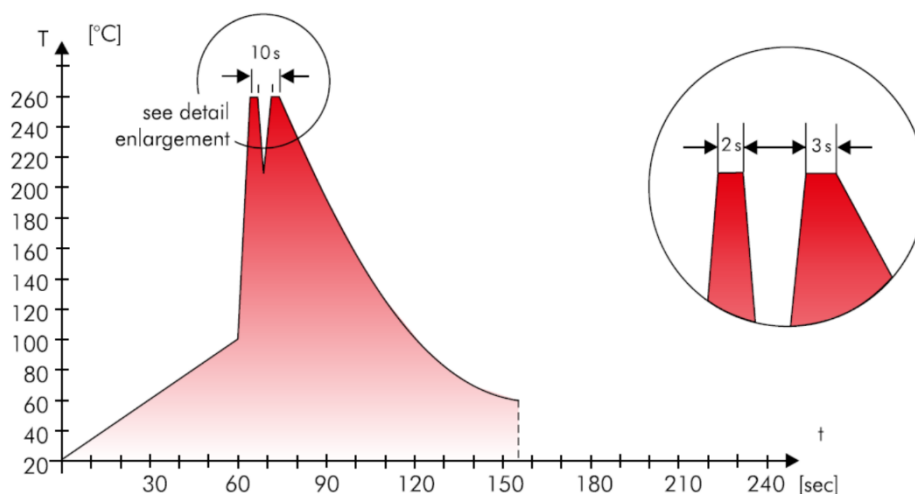
請勿將聚丙烯膜電容器通過粘合劑固化爐來固化表面安裝部件的樹脂，須在表面安裝零件固化後插入通孔零件。

如果通孔部件必須通過粘合劑固化過程，請諮詢 WINDAY，討論烘箱中的實際溫度分布。

建議最多進行兩次焊接循環。在第二次焊接循環之前，請留出時間使電容器表面溫度恢復到正常溫度。

Do not place the polypropylene capacitor through an adhesive curing oven to cure resin for surface mount components. Insert through-hole parts after curing the surface mount parts. Contact WINDAY to discuss the actual temperature profile in the oven, if through-hole components must pass through the adhesive curing process. A maximum two soldering cycles is recommended. Allow time for the capacitor surface temperature to return to normal before the second soldering cycle.

#### ■ 雙波焊接的典型溫度/時間圖 Typical temperature/time graph for double wave soldering (Figure 1)



該表顯示了焊接過程的最高設置溫度 The tables indicates the maximum set-up temperature of the soldering process

介電薄膜材料 Dielectric Film Material	最高預熱溫度 Max. Preheat Temperature		最高峰值焊接溫度 Max. Peak Soldering Temperature	
	Pitch ≤ 15 mm	Pitch > 15 mm	Pitch ≤ 15 mm	Pitch > 15 mm
聚乙酯膜 Polyester	130°C	130°C	270°C	270°C
聚丙烯膜 Polypropylene	110°C	130°C	260°C	270°C