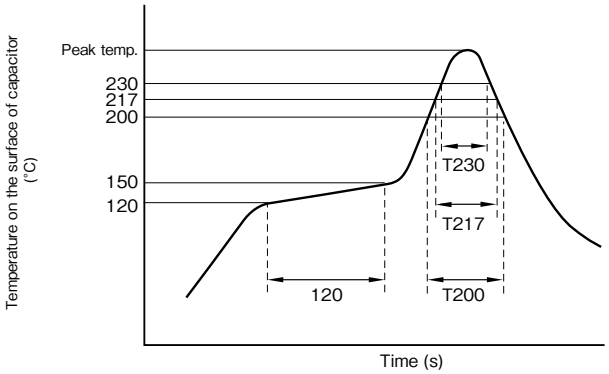
■ Recommended soldering conditions (Lead Free)

● Series DS, DSK, DVN, DVL, DVS

Reflow soldering conditions.

Profile



1. Preheating shall be under 150℃ within 120 seconds.
2. Peak temperature shall be within the following table.
3. For conditions exceeding the tolerances, consult with us.

T200 : Duration while capacitor head temperature exceeds 200℃ (s).
T217 : Duration while capacitor head temperature exceeds 217℃ (s).
T230 : Duration while capacitor head temperature exceeds 230℃ (s).
The measurement temperature point is the case top.

Series	Size	Peak temp. (5sec or less)	T230	T217	T200	Reflow cycle
DS DSK	φ4.8 to φ6.8	250℃ Max.	20sec. max.	30sec. max.	40sec. max.	2 times or less
DVN DVL DVS	φ12.5	260℃ Max.	20sec. max.	30sec. max.	50sec. max.	2 times or less

Attention : Carry out soldering work at low temperature and in the shortest time within above conditions.
Do NOT reflow solder, when cell voltage is above 0.5V.
＊Please consult with us about reflow soldering conditions other than the above.

■ Recommended soldering conditions (Lead free)

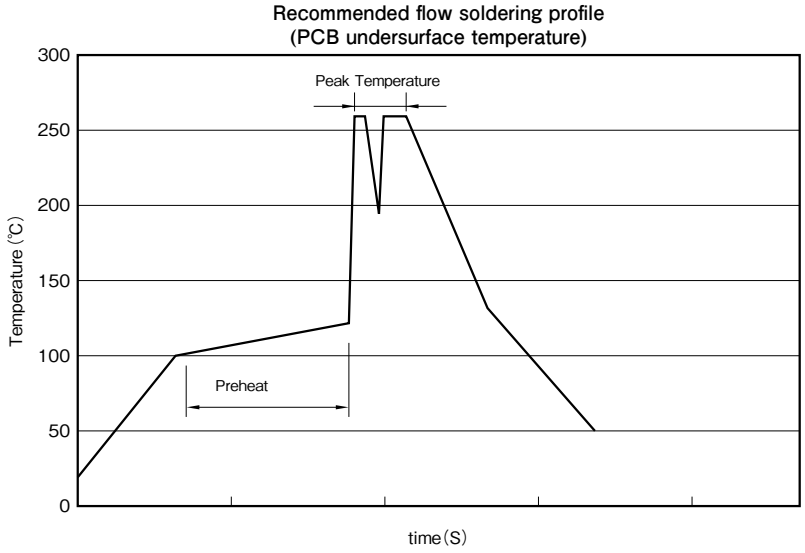
● Electric Double Layer capacitors

(1) Soldering iron conditions

Iron tip temperature should be 400°C±5°C within the duration of 4 secons.
However, soldering condition of DC or DCK series is only soldering iron.
DC or DCK series are iron tip temperature shou ld be 360 °C±5°C and the time should be 4 seconds or less.

(2) Flow soldering conditions

The recommendation soldering conditions of the product in which flow soldering is possible are as graph.



Type	Series	Size	Preheat		Peak	
			Temperature	Time	Temperature	Time
Coin cell	DB,DBN,DBJ DBS,DX,DXN DXJ,DXS,DH DHL,DHC	φ11.5 to φ21.5	100 to 110	30sec. max.	260°C Max	5sec. max.
Cylindrical cell	DZ,DZH,DZN DU,DUK,DZP	φ6.3 to φ35	100 to 130	30 to 60s	260°C±5°C	10sec. max.

Cautions when soldering

(1) Do not dip the capacitor into melted solder.
(2) Do not flux other part than the terminals.
(3) If there is a direct contact between the sleeve of the capacitor and the printed circuit pattern or a metal part of another component such as a lead wire, it may cause shrinkage of crack.
(4) If it is a coin type, please manage so that main part temperature including preheating does not exceed 90°C.
(5) Please refer to cautions for using on page 239 to 240 and the specification about other notes.

NOTE : Design, Specifications are subject to change without notice.
It is recommended that you shall obtain technical specifications from ELNA to ensure that the component is suitable for your use.