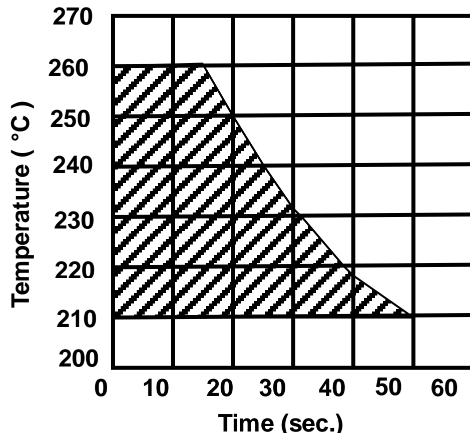
(3) Allowable Soldering Temperature and Time

i. Solder within the temperature and time combinations, indicated by the slanted lines in the following graphs.

ii. The excessive soldering conditions may cause dissolution of metallization or deterioration of solder-wetting on the external electrode.

iii. In case of repeated soldering, the total accumulated soldering time should be within the range shown below figure. (For example, Reflow peak temperature : 250°C, twice → The total accumulated soldering time at 250°C is within 20sec.)

<Allowable Reflow Soldering Temp. and Time>

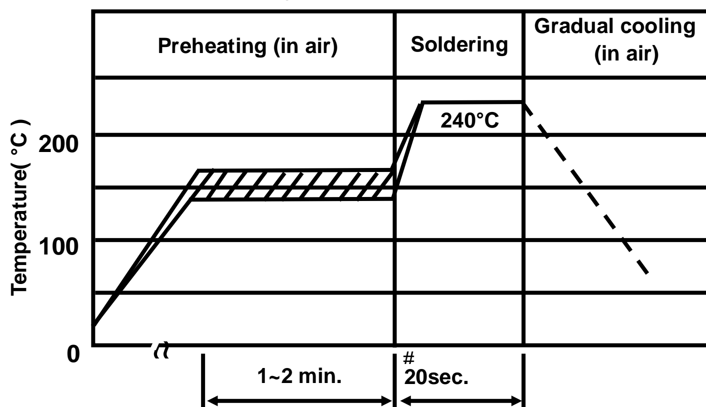


(4) Standard Temperature Profile for Soldering

i. Insufficient preheating may cause a crack on ceramic body.
Difference between preheating temperature and maximum temperature in the profile shall be 100 °C.

ii.Rapid cooling by dipping in solvent or by other means is not recommended.

<Reflow Soldering Condition>



Preheating: 150 +/- 10 °C
1min. to 2 min.
Soldering: 240 °C
20sec.

#: In case of repeated soldering, the total accumulated soldering time should be within the range shown above figure (3).

(5) There is a fear of unexpected failures (tombstone, insufficient solder-wetting, etc.) in your mounting process, caused by the mounting conditions. Please evaluate if this product is correctly mounted under your mounting conditions.

(6) Conditions with Soldering Iron

When hand soldering by iron is applied, be sure to keep following conditions.

Item	Conditions
Preheating	at 150°C for 1 to 2 minute
Temperature of Iron-tip	350°C max.
Soldering Iron Wattage	30W max.
Diameter of Iron-tip	3mm dia. max.
Soldering Time	5sec. max.
Solder	H60A (Sn:Pb=60:40wt%) type , H63A (Sn:Pb=63:37wt%) type, Sn:Ag:Cu=96.5:3.0:0.5wt% or equivalent type.
Flux	Do not use strong acidic flux (with halide content exceeding 0.2wt%).
Caution	･Do not allow the iron-tip to directly touch the ceramic body. ･Preheat the ceramic body and mounting board.

8. Do not give this product a strong press-force nor a mechanical shock. Because such mechanical forces may cause cracking or chipping of this ceramic product.

9. Rapid cooling or heating during soldering is not recommended.
Such treatment may destroy the element.

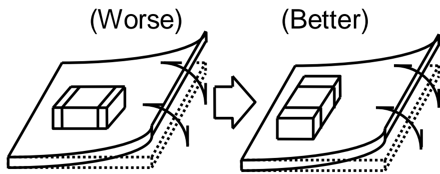
10. Resin coating

Please select the resin of which hardness shrinkage is much less, on selecting a resin materials.

11. Location on Printed Circuit Board(PC Board)

<Component Direction>

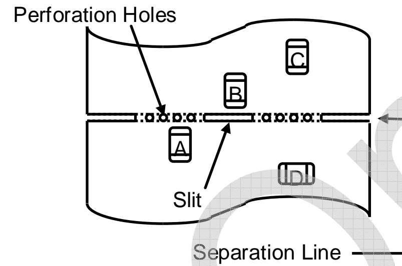
Locate this product horizontal to the direction in which stress acts.



<Mounting Close to Board Separation Line>

Put this product on the PC Board near the Slit, not near the Perforation Holes.

Keep this product on the PC Board away from the Separation Line.



Reference Only