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Correcting Bridging

The following shapes are recommended as shown. Please select the best shape for the solder amount.

**Please operate with clean tip.*

	Solder amount of Bridging	
	Large	Small
Shape J	○	○
Shape K	○	○
Shape BCM/CM	×	○
Shape H	○	○



Tough condition showing in the photo is easily corrected by selecting the best tip shape for the trouble.

1. Why does bridging occur?

The following causes are assumed:

- Soldering feed amount is too large.
- Iron movement speed is too fast.
- The tip is oxidized.

Pb (lead) free soldering tends to be bridging due to its characteristic of clingness. While paying attention to the above 3 points, drag the tip slowly as if absorbing the solder of the bridged-section or placing it on the tip.

* In the soldering industry, solder condition is called “non-clingness” when solder cuts easily and come off the work. Pb free solder tends to cling and causes some problems such as bridging due to its high viscosity.

2. How is Bridging prevented?

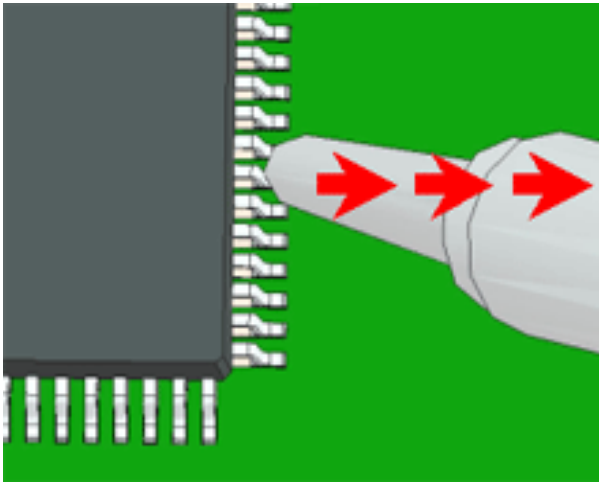
Changing tip shapes can prevent it.

- In case of drag soldering, [Shape BCM/CM](#) having the hollow with its surface is recommended.
- In case of soldering at narrow pitches, the soldering tips with fine tip end are recommended.

* Refer to [“Soldering at the narrow pitches”](#).

Use Shape BCM/CM

This shape has the follow section to its cut face, providing high solder retention capability. It offers other recommended usages.



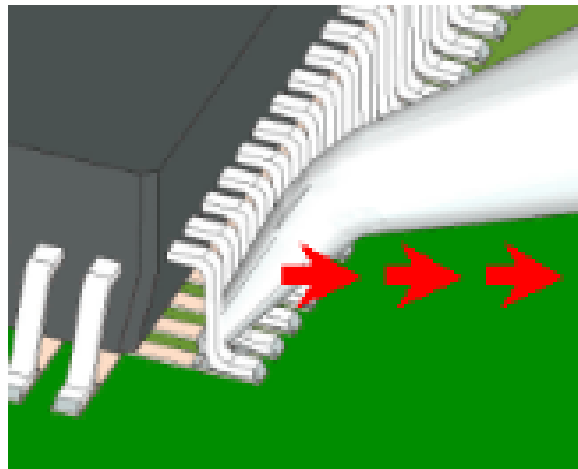
1. Clean solder left in the hollow section by a cleaning sponge, etc.

! A small amount of solder may be left in the hollow section

2. Put the tip on the bridge section and drag it.

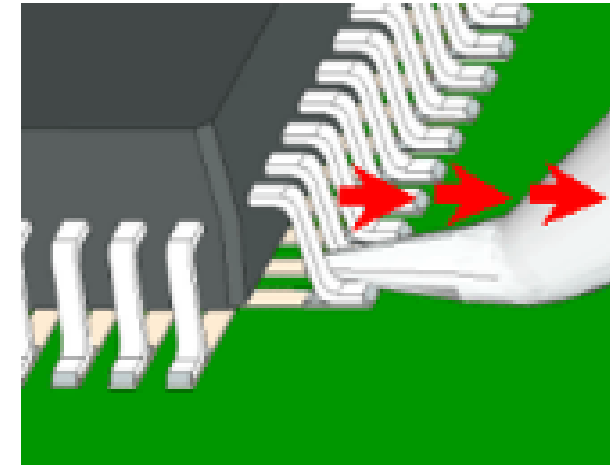
Use Shape J

This shape differs from Shape B and I by bending the tip end and is capable of soldering by applying the tip in 2 ways: face and point. It offers other recommended usages



If the bridge amount is small".

Stand the tip on end and drag the tip slowly.



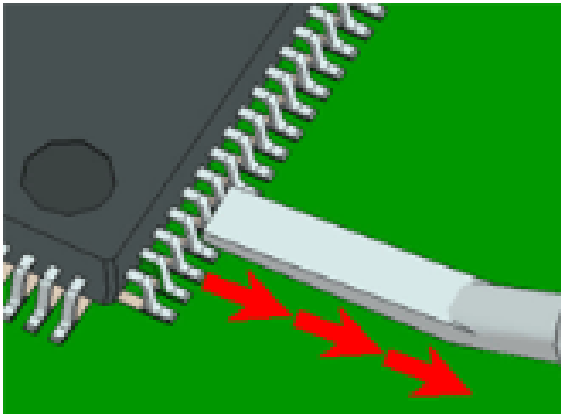
"If the bridge amount is large.

Lay down the end pad section and drag the tip slowly while putting the tip on the solder in the bridged section.

The operating bellow is also available

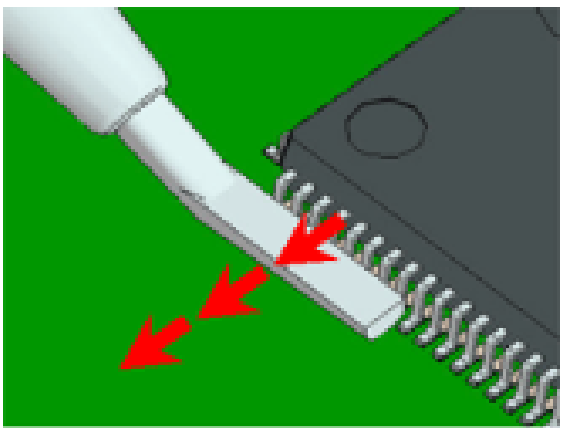
Use Shape H

This shape differs from Shape J by cutting the tip end. It offers other recommended usages.



If the bridge amount is small

Lay down the pad section and drag the tip slowly.

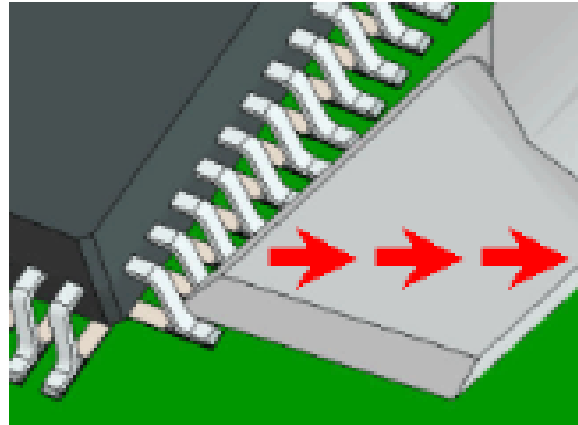


If the bridge amount is large

Lay down the pad section and drag the tip slowly

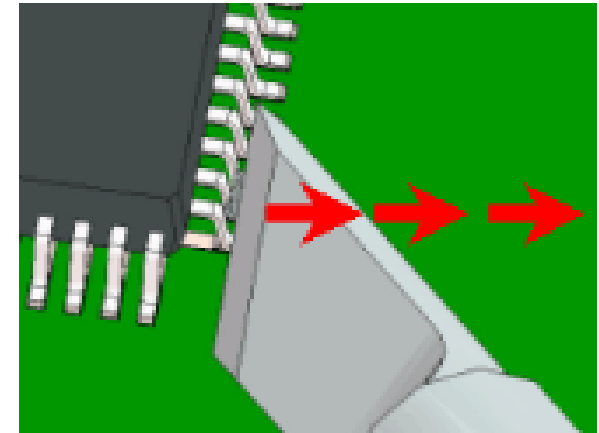
Use Shape K

This type has a shape like a knife and is capable of soldering by applying the tip in 3 ways: line, face and point. It offers other recommended usages



If the bridge amount is small

Stand the blade on edge and drag the tip slowly.



If the bridge amount is large

Lay the blade down and drag the tip slowly.

* Do not stand the blade up at too steep angle.
Doing so will damage the P.W.B.

