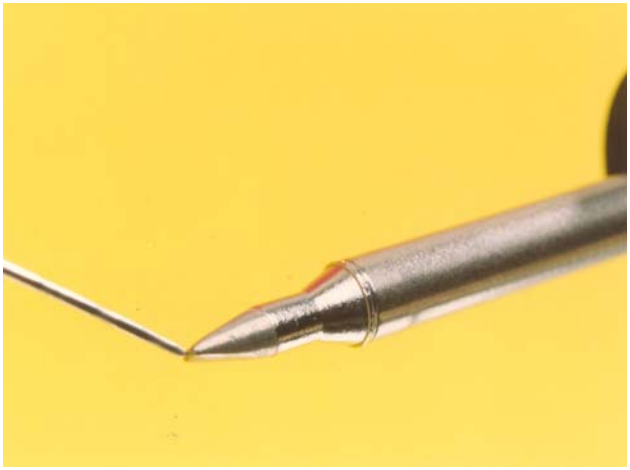
HAND SOLDERING & DE-SOLDERING GUIDE

Select the correct soldering iron bit for the size of termination being soldered and switch the iron on. The bit should be no larger than the termination to be soldered

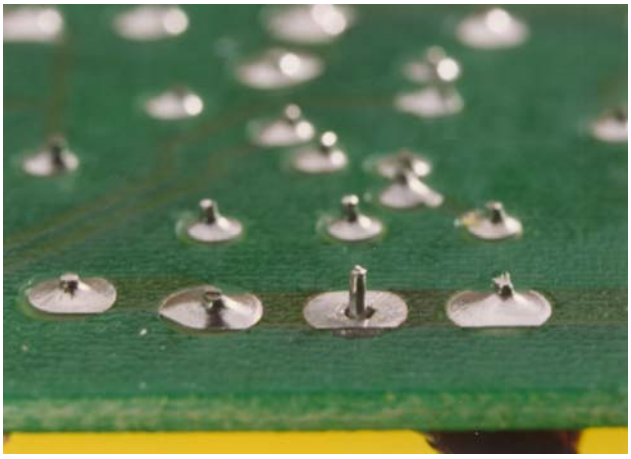
When the soldering iron bit has reached, temperature wipe the bit on the moist sponge to remove any of the oxidised solder and flux debris from previous soldering operations

Using the appropriate cored solder wire, tin the soldering iron bit prior to soldering. This will aid heat transfer and speed up the soldering operation. Always re-tin the bit before storing the iron back in the holder



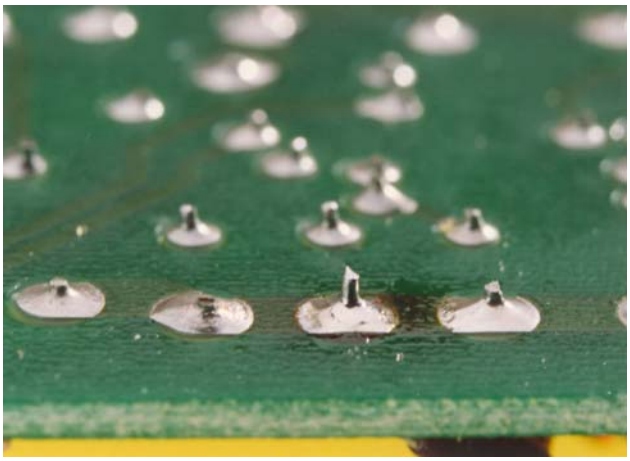
HAND SOLDERING & DE-SOLDERING GUIDE

Position the board for the soldering operation. The lead protrusion should be between 1.0 - 2.0mm to allow a satisfactory joint to be produced



Place the soldering iron bit on the joint area. The tinned bit will allow heat transfer to start before adding the required amount of solder. Care should be taken to use the correct gauge of solder wire

When the joint is completed it should show satisfactory wetting between the termination and the pad surface. If cleaning is required on the product the flux residues around the joint may be removed using a suitable cleaning agent

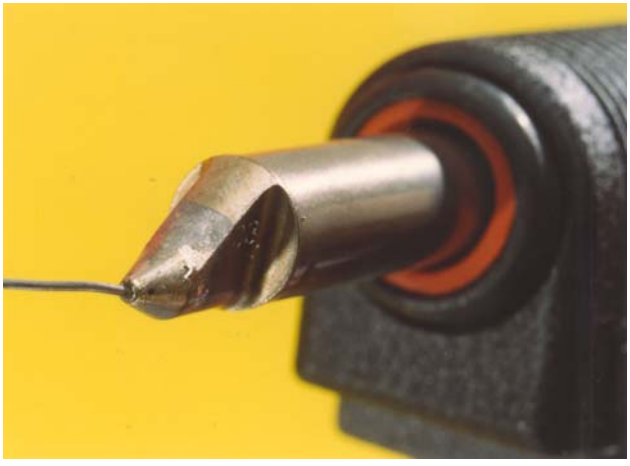


HAND SOLDERING & DE-SOLDERING GUIDE

Select the correct de-soldering iron bit for the size of termination being soldered and switch the iron on. The de-soldering bit should be slightly smaller than the land; the hole should be slightly larger than the lead diameter

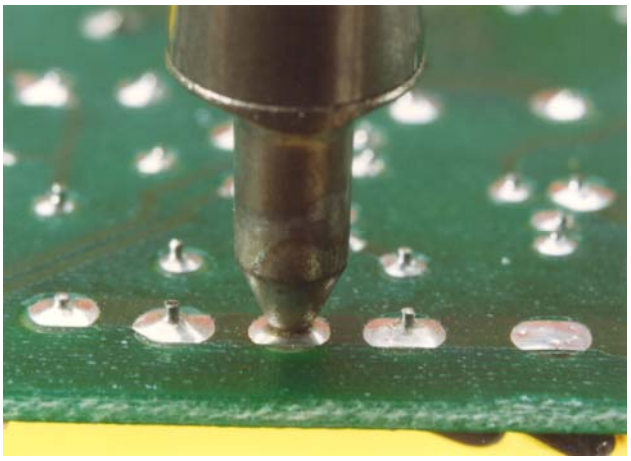
When the soldering iron bit has reached temperature, wipe the bit on the moist sponge to remove any of the oxidised solder and flux debris from previous soldering operations

Using the appropriate cored solder wire, tin the de-soldering iron bit prior to de-soldering. This will aid heat transfer and speed up the operation. Always re-tin the bit before storing the iron back in the holder

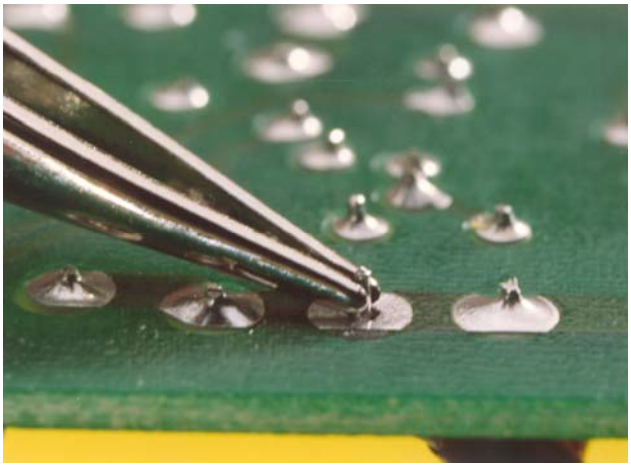


HAND SOLDERING & DE-SOLDERING GUIDE

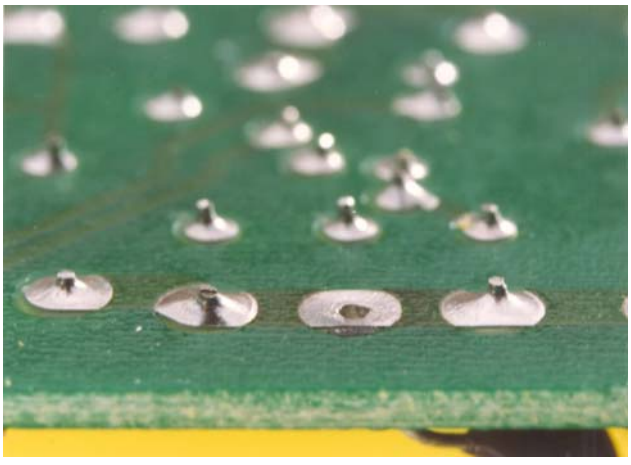
Place the de-soldering iron bit over the lead and wait for reflow of the solder. By rotating the wire termination slightly without pad contact, complete reflow in the plated through hole can be confirmed before applying the vacuum to remove the solder



Before attempting to remove the component termination check that the solder has been completely removed from the plated through hole. If the lead can be moved freely using tweezers it confirms that all the solder has been removed



Carefully remove the component lead from the through hole and check the pad on each side of the board for any evidence of damage

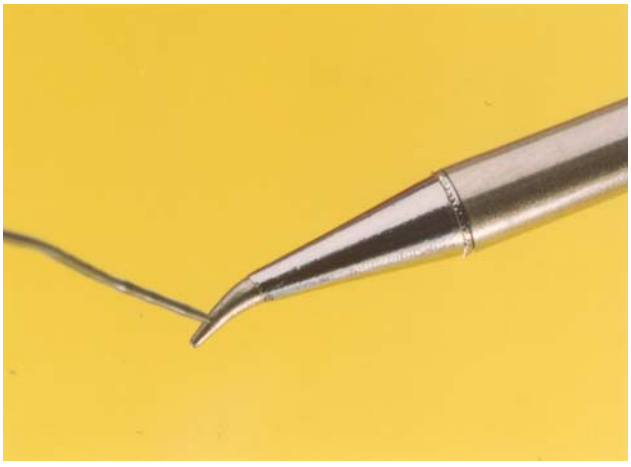


HAND SOLDERING & DE-SOLDERING GUIDE

Select a special fine bit soldering iron for the size of termination being soldered and switch the iron on. The bit should be no larger than the termination to be soldered

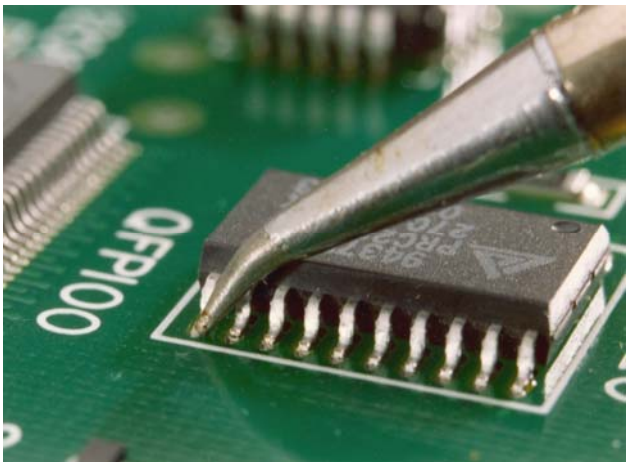
When the soldering iron bit has reached temperature wipe the bit on the moist sponge to remove any of the oxidised solder and flux debris from previous soldering operations

Using the appropriate cored solder wire, tin the soldering iron bit prior to soldering. This will aid heat transfer and speed up the soldering operation. Always re-tin the bit before storing the iron back in the holder

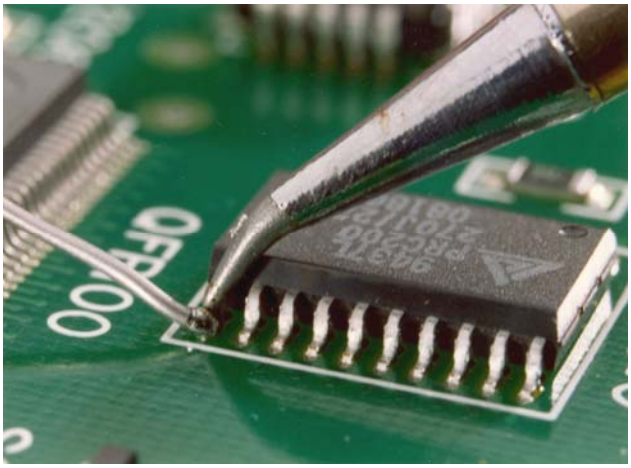


HAND SOLDERING & DE-SOLDERING GUIDE

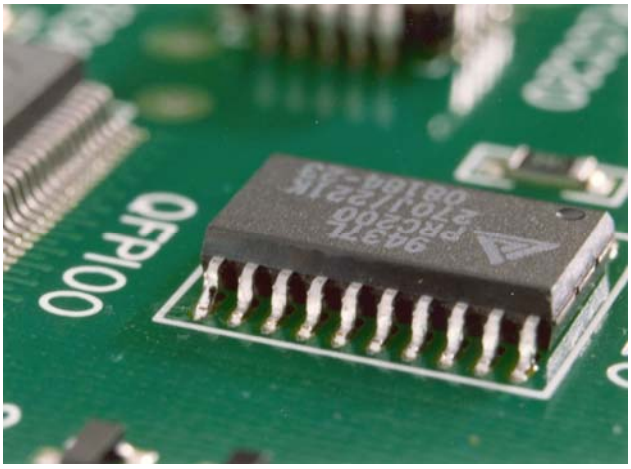
Position the board and locate the multiple lead device in the centre of the pad surface. Selected terminations may be tack soldered to hold the component in position.



Place the soldering iron bit on the joint area. The tinned bit will allow heat transfer to start before adding the required amount of solder. Care should be taken to use the correct gauge of solder wire to avoid flooding the joint with solder

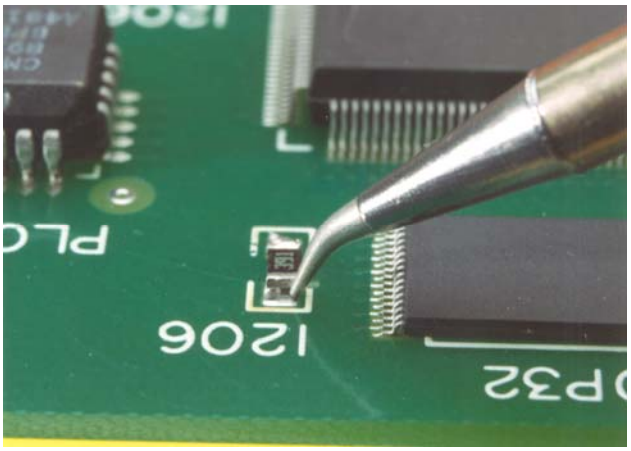


When the joint is completed it should show satisfactory wetting between the gull wing termination and the pad surface. If cleaning is required on the product the flux residues around the joints may be removed using a suitable cleaning agent

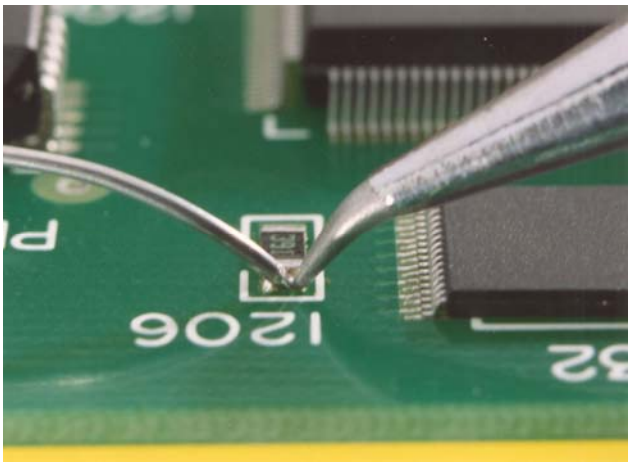


HAND SOLDERING & DE-SOLDERING GUIDE

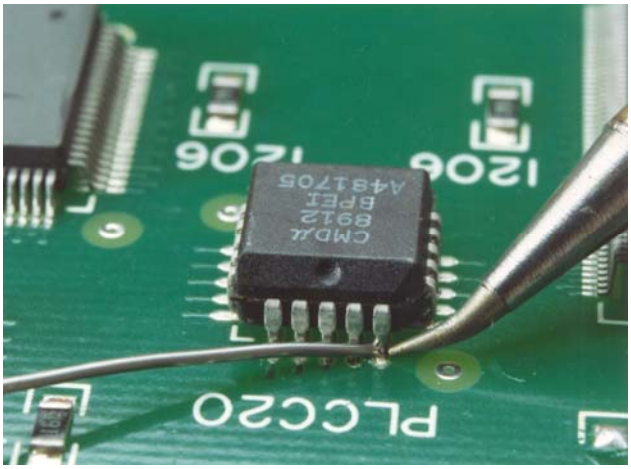
When hand soldering chip components, first clean and tin the soldering bit and place it in contact with the terminations



Using the correct gauge solder wire, position the wire on the terminations adding the appropriate amount of solder to meet the solder joint specification



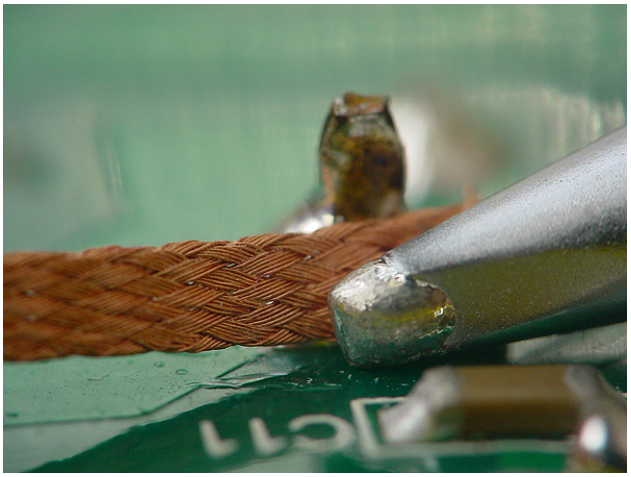
The same procedure and soldering iron bit may be used for leaded terminations like the J-lead PLCC package. Due to the smaller termination area, a finer gauge solder wire may be required



HAND SOLDERING & DE-SOLDERING GUIDE

Solder wick may be used for desoldering single sided joints or removing solder shorts. Select a fresh copper braid the same size as the solder joint or slightly smaller and place it on the joint surface

Use a tinned soldering iron tip slightly smaller than the copper braid. Place the tip on the surface, provided the braid is fresh there is no reason to apply any pressure during desoldering



When the joint reflows the solder will wet along the copper braid, capillarying between the copper strands. When the solder has been removed from the joint surfaces all pins should be checked prior to removing the component