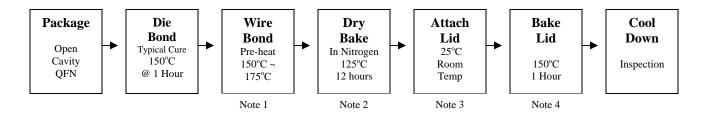


Lid Attach Application Notes M-QFN Package with Dome or Flat Lids

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CAUTION: Do not pre-bake lids with a B-Stage epoxy adhesive pre-form.



Note 1.

Dry baking is <u>not</u> required if lid attach is done within 8-hours after completing die attach and wire bonding. The die attach curing process typically requires heating the package to 150°C for 1-hour. Ball bonding typically requires pre-heating the package to 150°C or 175°C for wedge bonding. In most cases, this will be sufficient to remove moisture from the assembly such as solvents and volatiles from die attach materials.

Note 2.

It is recommended to bake the uncovered package in a nitrogen oven for 12 hours at 125°C if the lid attach process is performed more than 8 hours after completing die attach and wire bonding. The die attach epoxy (adhesive) is susceptible to picking up moisture. Dry baking will minimize voiding under the die.

Note 3.

Place lids onto the package at 25°C room temperature. Do not pre-bake lids. Curing of lids (with B-Stage adhesive pre-form) is typically performed at 150°C for 1 hour with pressure of 1/2-lbs per square inch of lid bonding area.

Note 4.

Caution: The B-stage lid adhesive may still be in a liquid state if the assembly is prematurely removed from the oven before the lid has fully cured (C-Stage).

Cooling of the air will drop the pressure inside the package and may cause a void in the lid seal area due to outside air "blowing through" the lid adhesive. Avoid prematurely opening the door of the oven during the lid-attach baking process (prior to proper cure) to minimize voiding around the lid seal area. Voids in the lid seal adhesive will prevent a watertight lid seal.

Note 5.

Non-Hermetic: M-QFN is a non-hermetic plastic package and is not intended to be used in applications that require a vacuum hermetic seal.