

The QFN Lid Series was designed for Barry's C-QFN Air Cavity Family. There are several methods of attachment. Below are some of the more common methods.



QFN Lid Attachment Options:

Epoxy:

Ceramic lid is attached to the top surface of the package wall using B-stage nonconductive epoxy. We recommend our unmetallized lid configuration for this method (LID-XX-000).

Sealing Glass†:

Ceramic lid is attached to the top surface of the package wall using a low temperature glass.

This method results in a hermetic seal.

Solder:

Metallized ceramic lid or metal lid is attached to the metallized top surface of the package wall. The most common alloy used is AuSn eutectic.

QFN Lid Dimensions:

This method results in a hermetic seal.

Excluding Metallization

This method does not result in a hermetic seal.

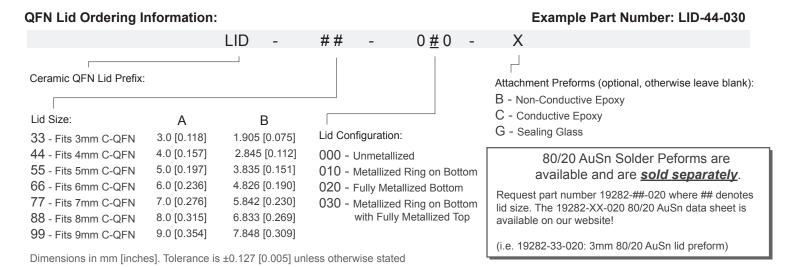
The leak rate of a properly sealed QFN package will be $<1x10^{-8}$ atm cc/s He. We provide QFN packages and lids separately in an open configuration. Therefore we test in accordance with MIL-STD-883 method 1014 Test Condition A4 as appropriate for unlidded packages.

† The temperature required to melt even this type of glass may present problems depending on the characteristics of the semiconductor used and the attachment method.

QFN Lid Configurations:

LID-XX-000 LID-XX-010 LID-XX-030 LID-XX-020 Top of lid В Filled Vias Connecting Seal Ring to Outer Metallization 0.635 **Bottom** [0.025]Metallization of lid R Max. (4x) 0.381 Metallized Ring on Bottom Unmetallized Metallized Ring Fully Metallized [0.015]with Fully Metallized Top on Bottom Bottom 0.025 [0.001] Ceramic

Metallization: RoHS 50u inches gold (min.) over 50u inches nickel (min.) over tungsten or MoMN refractory metallization.



Barry Industries reserves the right to change part number and/or process without notification.



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