

Mounting

DLI offers metallization schemes compatible for both chip and wire filters, and solder-surface mount filters. The correct metal scheme will be employed to ensure reliable connectivity depending on the desired mounting method. Custom metallization schemes are also available. Please consult the factory for more details.

Solder-surface mount filter typical metal scheme

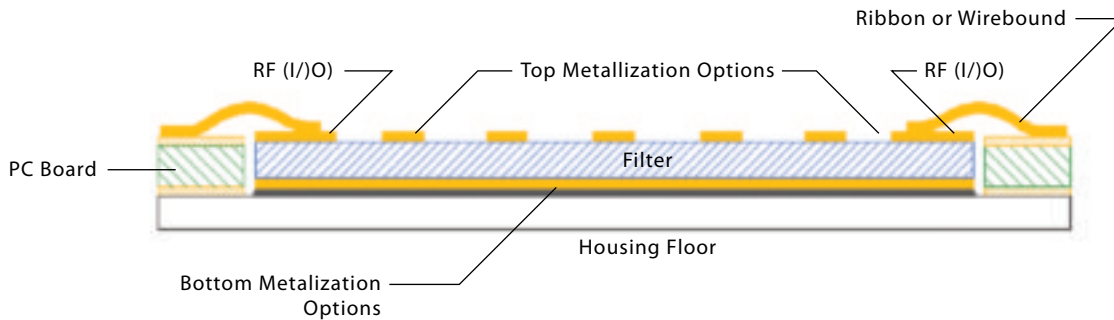
[top and bottom]:

3-6 micro inches of gold over
50 micro inches of nickel over
100 micro inches of gold over
300 Angstroms of titanium

Chip and wire filter typical metal scheme

[top and bottom]:

100 micro inches of gold over
300 Angstroms of titanium



The above illustration demonstrates the mounting of a typical chip and wire filter. The circuit is relieved to accommodate the filter. The bottom surface of the part is attached directly to the system ground plane using conductive epoxy. Wire or ribbon bonds are launched from the circuit to the filter I/O pad. In a typical application a channelized housing would sit over the filter to provide adequate RF shielding.

Surface mounting techniques typically rely on a solder bond between the bottom conductor of the component and the ground conductor of the circuit board. The I/O connection is realized through edge castellations on the filter which mate with contact pads when the component is mounted on the board. Note the use of multiple ground vias between the component and the system ground plane to ensure optimal performance. Solder surface mount designs are custom matched to the specific board material on which they will be placed. In a typical application, a channelized housing would be placed over the filter to provide RF shielding.

