

Application note

M22 – M12 package mounting

Strip Line:

The M22/M12 package is designed for use in a 0.062” stripline transmission medium. In this configuration the leads of the M22/M12 package would be sandwiched between two layers of 0.062”stripline material with a 50 ohm transmission line printed on one of the PCB halves. The RF ground to the package is obtained by a direct metal to metal contact with the case enclosure. The case consisting of two metallic plates is typically held together by means of a clamping force. In this configuration ACC sees a near identical electrical performance to the coaxial test fixture.

STRIPLINE MOUNTING OF THE M22 MODULE

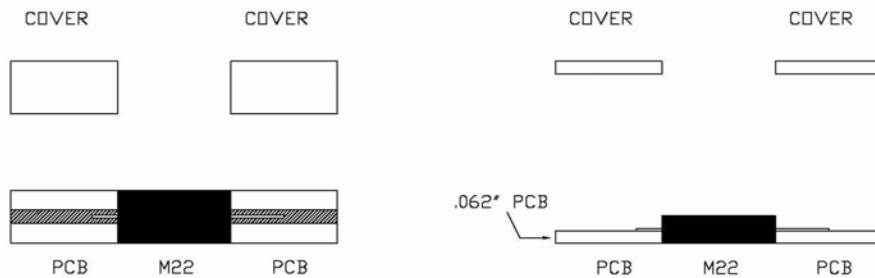


Diagram of stripline assembly

Micro-stripline and Co-Planar W/G design:

While the M22/M12 module was developed as a stripline package, it can be, and is most commonly used as a drop-in circuit with micro-stripline technology. ACC does not have data on coplanar waveguide transition but use of common microwave design guidelines should apply as with any microwave transition. The grounding of the case as close to the micro-stripline transition point is crucial to the RF electrical performance. Use of a clamp, silver epoxy or low temperature solder are all acceptable attachment methods.

MICROSTRIPLINE MOUNTING OF THE M22 MODULE

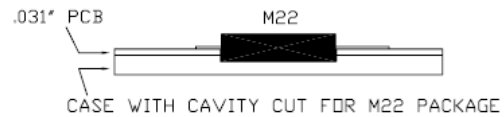
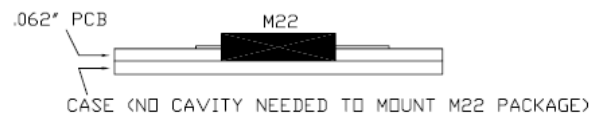
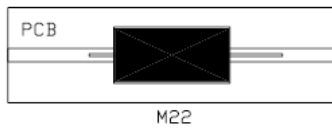


Diagram of stripline assembly