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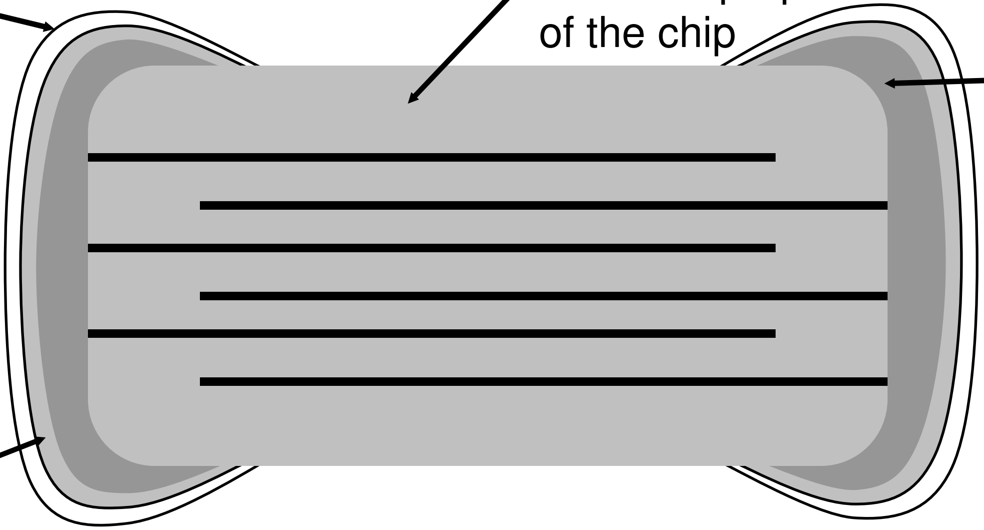
Anatomy of a Termination Metallization



Ceramic Material: Provides the dielectric properties of the chip

Solder Layer: Preserves the solderability of the nickel layer. It must be thick and dense to keep oxygen and water from reaching the barrier layer.

Thick Film Termination: Provides the electrical connection from the circuitry on the PCB board to the electrodes in the device.

Barrier Layer: This is the surface to which the solder bonds during assembly. It must be thick enough to stay intact during IR reflow or wave soldering so that the thick film material does not leach away. It must also be thick enough to prevent the inter-metallic layer between the thick film termination and the barrier layer from affecting the solderability.

Standard – Ni
Non –Magnetic Applications - Cu