

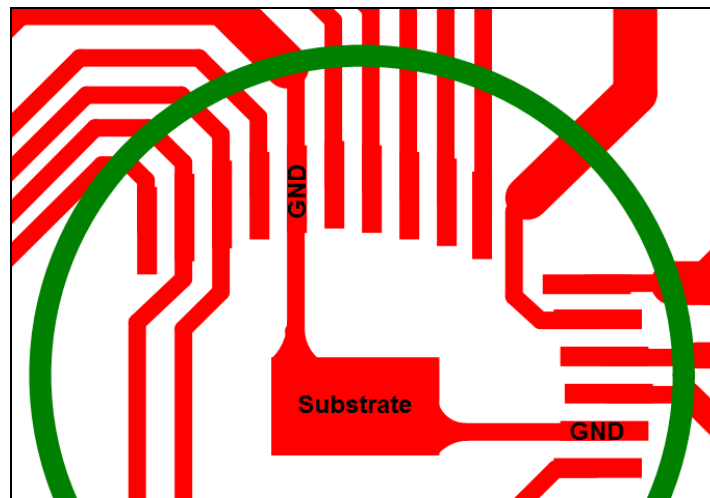
Application Notice for PCB Layout of Speech IC

Description: The speech IC will heat up during playback, if the COB heat dissipation is poor, there is a chance that the operating temperature exceeds its range, please pay attention to the PCB layout design.

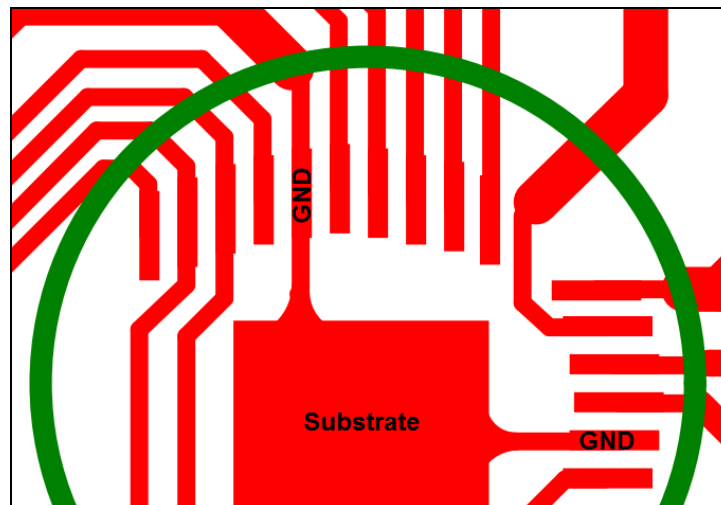
Reason: When IC plays speech/audio, the IC temperature will heat up. The higher voltage or lower speaker ohm, the higher temperature. There is a chance that the operating temperature exceeds its range if the COB dissipation is poor. Besides, the IC without epoxy will quickly heat up during playback, which result in higher operating temperature.

Solution:

1. In layout stage, connect the GND with Substrate on the COB board to expand the dissipation area.



2. In layout stage, enlarge the substrate on the COB board to expand the dissipation area.



3. Add epoxy resins for COB encapsulation.