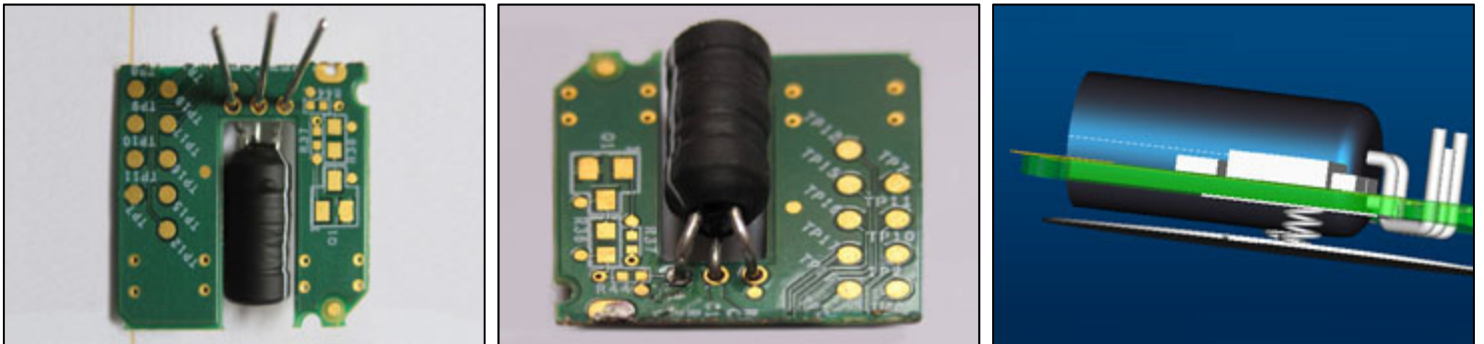


AST Transformer Used in Retail Security Tags – *Case Study*



Overview: ISL had supplied an AST transformer to Tyco/Sensormatic, a world leader in retail theft prevention. The transformer took in 1.5V from a coin battery and produced 20V minimum output to drive a piezo alarm loud enough to deter theft.

Challenge: ISL Products had to design a transformer that could be used in the existing design housing, which meant that the transformer could not exceed 12mm x 5mm. In addition to the size constraints, the customer needed us to do an unusual custom lead forming to properly fit the transformer into the customer's current PCB configuration. The security tag that this transformer is powering had to be loud enough to alert security guards and robust enough to withstand multiple uses.

Solution: We created a transformer that met all of the customer's parameters by utilizing unique properties of magnetics. We were able to save space in their unique PCB assembly and increase performance. The transformers were easily installed into each application and put into millions of units that are still working today.