

EV Battery Box & Controller Applications

BACKGROUND

In an environmentally conscious world we frequently hear phrases like, “save energy” and “cut emissions”. This mind set has led to the inevitable development of electric vehicles. The connector of choice for the EV battery boxes and controllers has been trending towards the GT style series. The ability to transfer large amounts of current throughout the whole electric system of a vehicle has made it a top choice of engineers.

PROBLEM

The current design utilizes a cable-clamp style back-shell and doesn't allow the shielding net to be wrapped around it. Without the shielding net the connector cannot meet the EMI specifications. Another issue is this back-shell is too long and won't fit into the tight areas required by the application. The customer needs a shorter connector which can shield the electromagnetic interference.

AIO SOLUTION

ATS designed a new GT plug, did away with the back-shell and made the plug shell longer. This now allowed enough length for the shielding net to be put in place. ATS also opened up the mold tool so the connector and shielding net could fit and be overmolded. The end result was a shorter EMI protected connector perfect for the customer's application.

