



Charcroft was able to specify a power supply for the restoration of the Art Deco Brighton Belle electric train

A good distributor leaves no stone unturned

It doesn't matter where a problem is first identified in the supply-chain, what really matters is how quickly a distributor can solve it. This is particularly true when a distributor effectively has two customers on a single bill of materials (BOM): the original equipment manufacturer (OEM) and a contract electronics manufacturer (CEM). Addressing these challenges is not always straight-forward and the best solution can sometimes come from an unexpected direction.

Commercial challenges arrive on a daily basis: perhaps a lead-time has gone out, or a component has been made obsolete. A CEM may need to get an alternative part approved before current inventory runs out, or need help in meeting a particularly tight production budget. The technical challenges can come from the CEM or the OEM and are almost always unique to each project. Despite this diversity, it is the cost, time and physical size which are the most common factors in any challenge.

Finding replacements

Take the example of a high-voltage power-supply OEM which was in the process of upgrading an existing product. Charcroft's application specialist and passives product specialist considered the issue from different technical perspectives and presented three alternative solutions. One of these solutions was to replace the existing surface-mount resistor with a through-hole alternative. This not only achieved the technical goals of the upgrade but also allowed the CEM to reduce the unit cost of the component.

Meeting time constraints

Lead-times are perhaps the most common time-based challenge. One OEM, for example, had originally designed-in a power supply

which was manufactured off-shore. Problems started to arise when the supplies began to fail and replacements were weeks away. By suggesting an alternative module from its UK-based inventory, Charcroft was able to help the OEM ensure timely delivery of replacements.

Fast delivery of samples can also be vital. When a CEM was trying to secure a new antenna contract for deployment in the Antarctic, it was the fast delivery of UK-manufactured high-Q ceramic capacitors which was pivotal in securing the contract.

Dispensing specialist advice

Specialist product advice can help those working on legacy products from the past as well as those working on cutting edge designs set to shape the future of the electronics industry. One intriguing challenge presented to Charcroft was to specify a power supply for the restoration of the Art Deco Brighton Belle electric train, which will return to mainline service almost 85 years after she was built.

At the other end of the historical spectrum, a design for a new aeronautical drone needed help in finding an aluminium capacitor capable of delivering the highest possible capacitance density.

Delivering solutions

There are countless issues that can get in the way of a successful production run and a distributor must be willing, and able, to help to solve them all. It is this ability to provide viable solutions which earns a distributor the right to be considered a valued supply-chain partner.

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Being willing to find a solution for all kinds of technical and logistical challenges is the mark of a good distributor, explains director of Charcroft Electronics, Debbie Rowland



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