

Second sourcing is the key to continuity

Ensuring second-source options early in the design process can help buyers to maintain continuity of supply throughout the extended lifetime of a military system, explains Debbie Rowland



If the recurrence of allocation on some passive components teaches us anything, it is that purchasing professionals need to be involved at the earliest stage of component selection. While buyers may not be able to influence the form, fit or function of a component, they certainly have an important role to play in how the part is documented. The way in which a part is entered on the drawings and the bill of materials can have a major impact on how easy it is to procure the part. In the long term, this could make the difference between continuity of supply and a line stop.

Single sourcing risks

When an engineer specifies a resistor or capacitor which is genuinely single-source they present additional challenges to their purchasing colleagues. If the lead-time slips, or there are quality issues, the buyer has no room for manoeuvre in sourcing an alternative device, and if a sole manufacturer makes a part obsolete, then there is no choice but to return to the drawing board for a re-design.

Single-source parts are also not subject to the same competitive pressures as multi-sourced devices. As component manufacturers constantly monitor the lead-time, price and minimum order quantity of competing devices, multi-sourced parts are subject to constant pressure to stabilise or improve both the price and availability.

Documentation differences

The recent approval of Exxelia wet tantalum capacitors to DSCC MIL 39006/22/25 is a good example of how availability can be affected by the way in which a part is documented.

Buyers may often find these wet tantalum capacitors specified under an Arcotronics part number. In this case, specifying the manufacturer's name would effectively make the device sole-source. It would also make it obsolete following the acquisition of Arcotronics in 2008.

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A more flexible approach would be to specify the capacitor by its product description as an 82 microFarad, 125V, 20 per cent tolerance, wet tantalum capacitor, in a T4 (D) case to either CECC, DSCC MIL 39006/22 or MIL 39006/25. Although more complex than simply writing a manufacturer part number, this opens procurement to any manufacturer who produces the part to either the CECC or Mil specification now or in the future. So, a buyer faced with an obsolete Arcotronics part could now source these parts from Exxelia without having to go back to the engineering department to request a change to the BoM.

Distribution support

Of course, buyers cannot be expected to research multiple sources before an engineer documents the design and this is where distribution should help. Deep engagement with customers allows the distributor to be more than just an order-taker. It provides a partnership in which the distributor can highlight potential problems with a single-source device and recommend alternative devices. A proficient distributor can also suggest the most appropriate way to document the parts to ensure procurement flexibility for long-term continuity of supply.

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Availability can be affected by the way a part is documented or described



Exxelia's approval to MIL 39006/22/25 provides a new source for wet tantalum capacitors



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