

TESTING VS TRACEABILITY



Charcroft sales manager, Debbie Rowland

While the Anti-Counterfeiting Trade Agreement (ACTA) edges slowly towards a global framework for enforcing intellectual property rights, the electronics industry is establishing its own ways to minimise the risk of sourcing components from the grey market.

One example of risk mitigation is the in-house testing offered by non-franchised sources to verify that a grey-market component's electrical, environmental and physical parameters are identical to those of the original manufacturer's part.

The question for buyers is whether in-house testing by a non-franchised source can ever provide the same level of protection as a component that has been sourced through a franchised distributor and is covered by the component manufacturer's warranty.

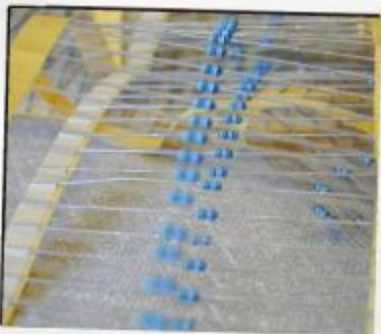
Franchised support

Consider the following scenarios: in the first, a buyer sources a component from a franchised distributor and the component subsequently fails during routine production testing or, more critically, after it has been supplied to the end-customer.

As soon as the fault is notified to the distributor, the manufacturer will begin a full investigation. This will check the component itself for faults, as well as the distributor's documentation to verify the traceability of the component back to the manufacturer. It will also use the expertise of the manufacturer's technical team, working with the customer, to review the overall circuit design; the component's placement on the PCB; the suitability of the

manufacturing process; and the integrity of the solder joints.

Can testing really replace traceability? Charcroft sales manager, Debbie Rowland, suggests there may be another solution when components go obsolete: switch to a replacement



Obsolete passives can be replaced by direct alternatives

manufacturing process; and the integrity of the solder joints.

If the fault lies with the component itself, then the customer will be covered by the manufacturer's warranty and returns system and in some cases, the customer may be offered additional compensation.

Run the risk

In the second scenario, the buyer sources goods from a non-authorised channel. Here, the buyer's own engineering team may have to carry out the investigation, with or without the support of the broker or distributor. The critical difference is that the

movement of the grey-market component cannot be traced throughout the supply chain. This means that the component may, at some point, have been stored in unsuitable conditions, which could be the underlying reason for the failure.

The reality is that buyers may not have a choice if the grey market is the only source of an obsolete semiconductor. If a franchised source is not available the buyer must relinquish the full support of the authorised channel and rely, instead, solely on in-house testing carried out by a non-authorised distributor.

Obsolete passives, however, often provide a third choice: that of identifying a direct equivalent from a different manufacturer. Charcroft's technical helpdesk can identify direct replacements with immediate availability for most obsolete passives. This will, of course, mean amending the bill of materials with the new manufacturer and part number, but using an equivalent part will provide a more cost-effective, long-term solution than paying a premium price and accepting the risk of buying obsolete passives on the grey market.