



Sensors & Controls Division

November, 2004

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Bourns Rep Distributor Managers
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Americas Sales Team
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Bourns Announces EA Series Absolute Contacting Encoder Enhancements



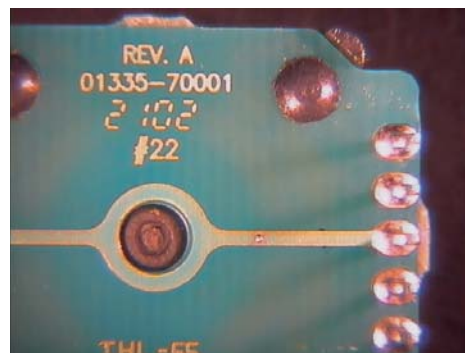
Bourns Sensors and Controls Division is pleased to announce several product enhancements to our [EA Series Absolute Contacting Encoder](#). We are changing our design from a ceramic printed element to a no-pass dielectric FR4 element. The change to this patented technology will provide the following enhancements:

- Through-hole plating process providing better electrical interconnects
- Elimination of silver termination ink and replacing it with gold plated circuitry providing better reliability
- Change to stronger, more robust, lead free terminals better suited for automatic terminal insertion

Customers will see a visual change from a white ceramic element to a green FR4 element as illustrated in the photos below. This change in materials and technology enhances the reliability of the product and does not affect electrical or mechanical performance of the product.



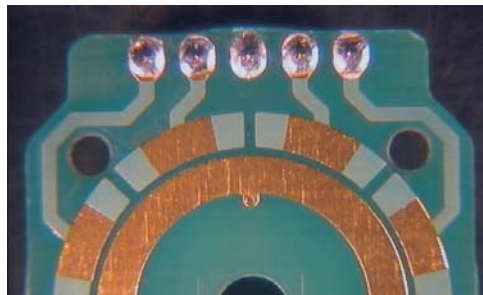
Ceramic Element (Bottom View)



FR4 Element (Bottom View)



*Printed Ceramic Element
(Internal View)*



*No-Pass Dielectric Element
(Internal View)*

Our engineering team has also enhanced the design of the contact spring to provide a longer wearing encoder with lower contact bounce.

In addition, the enhanced EA Encoder is now a “lead free” product in compliance with Directive 2002/95/EC on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment.

Product with the new FR4 technology will begin shipping after January 1, 2005. The new data sheet for the EA Series Absolute Contacting Encoder is now available on the Bourns website. An additional front-facing terminal style has been added as an option. Reliability test results on the product enhancements meet or exceed our current catalog specifications.

Please be sure your customers have been notified of this change prior to the date of implementation. For those customers requiring samples of the FR4 element version prior to the change, please contact the Field Application Engineer assigned to your area. They will assist you in placing a special sample order prior to the January 1, 2005 change.