

February, 2005



Sensors & Controls Division

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Bourns Rep Distributor Managers  
Corporate Distributor Product Managers  
Americas Sales Team  
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Europe Sales Team  
Bourns Internal



## Bourns Announces the Model EA Series Absolute Encoder (Non-Lead Free) Phase Out

As previously announced, Sensors and Controls is introducing 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 replacement with gold plated circuitry providing better reliability
- Change to stronger, more robust, lead free terminals that are 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. These changes in materials and technology enhance the reliability of the product and do not affect electrical or mechanical performance of the product.



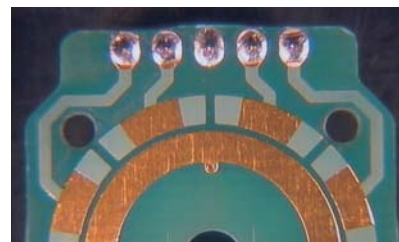
Ceramic Element (Bottom View)



FR4 Element (Bottom View)

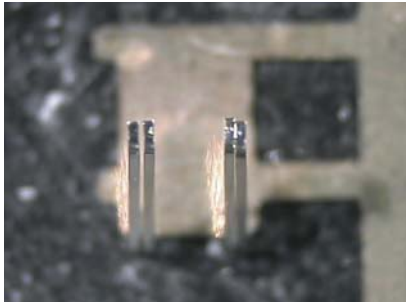


Printed Ceramic Element  
(Internal View)

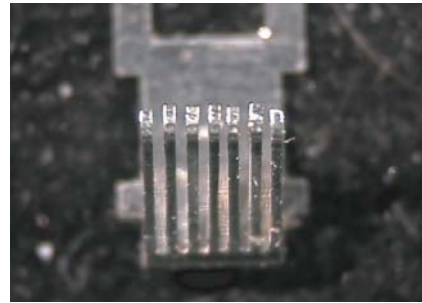


No-Pass Dielectric Element  
(Internal View)

Our engineering team has also designed a more robust contact spring to provide a longer wearing encoder with lower contact bounce.



**Old design contact spring**



**New design contact spring**

The enhanced EA Encoder is an “RoHS compliant” product in accordance with Directive 2002/95/EC on the restriction of the use of certain hazardous substances (RoHS) in electrical and electronic equipment.

The updated 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.

**We are in the process of phasing out the non-lead free version of the EA Encoder. We are now taking last time buy orders through March 31, 2005. All orders are for immediate delivery and may not be scheduled. All deliveries will conclude in Q2-2005.**

Please ensure your customers are notified of the last time buy for the non-lead free version.