Change to Ceramic Body Diameter for Model 2027-xx-SM Surface Mount Gas Discharge Tubes

In order to help improve the ability to effectively clean underneath the body of the Model 2027-xx-SM Gas Discharge Tube (GDT) after reflow solder, Bourns is implementing the following change to the product dimensions:

- Reduce the diameter of the ceramic body of the GDT from 7.93” to 7.50” to create a larger clearance gap between the GDT and the Printed Circuit Board (PCB).

This change is part of our continuous improvement of the Bourns® 2027 Series GDT products.

Impact on Form, Fit, Function, Reliability and Quality
The change does not impact the function, reliability, quality or the electrical characteristics of the product. While there is a dimensional change to the fit and form, the overall footprint of the product remains unchanged. Part marking and labeling will remain the same.

Details of the Improvement
The picture above provides a detailed view of the change. The reduction in diameter of the ceramic body (GDT on the right) provides a significantly larger gap between the PCB and the body of the GDT as compared to the prior design shown on the left.

To summarize, the only dimensional change to the Bourns® Model 2027-xx-SM is the reduction in diameter of the ceramic body. There are no changes to the overall length or maximum height of the GDT that could negatively impact existing customer designs and PCB layouts.
## Comparison of Dimensions Between the Prior Design and the New Design

### Key Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Old Design</th>
<th>New Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height of GDT</td>
<td>7.92 (312)</td>
<td>7.92 (312)</td>
</tr>
<tr>
<td>Length of GDT</td>
<td>6.42 (253)</td>
<td>6.42 (253)</td>
</tr>
<tr>
<td>Ceramic Body Diameter</td>
<td>7.93 (314)</td>
<td>7.50 (295)</td>
</tr>
</tbody>
</table>

**DIMENSIONS:** MM (INCHES)  **TOLERANCES:** 0.25 (0.010)

![Comparison Diagram](image_url)
Results of Qualification Testing
To assure no critical changes occurred in the electrical performance of the product related to this change, Bourns performed qualification and reliability tests on Model 2027-xx-SM. The results of those tests confirm no changes in reliability or electrical performance of the product. Test results are available upon request.

Identification of Changed Products
Traceability will be ensured through lot code/date code identifiers.

Implementation Dates

Samples: Available now, upon request  
First Production Shipments: March, 2014

Should you have any questions or need additional information, please contact Customer Service/Inside Sales.