**NOTES:**

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994
2. ALL DIMENSIONS ARE IN MILLIMETERS
3. BALL DESIGNATION PER JESD MS-028 AND JEP95
4. DETAILS OF PIN #1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. THE PIN #1 IDENTIFIER MAY BE EITHER A MOLD OR MARKED FEATURE
5. PRIMARY DATUM \(-Z\) IS SEATING PLANE

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**SUGGESTED PCB LAYOUT TOP VIEW**

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**PACKAGE TOP VIEW**

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**PACKAGE BOTTOM VIEW**

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**PACKAGE SIDE VIEW**

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**DIMENSIONS**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>MIN</th>
<th>NOM</th>
<th>MAX</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2.71</td>
<td>2.91</td>
<td>3.11</td>
<td>BALL HT</td>
</tr>
<tr>
<td>A1</td>
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<td>0.50</td>
<td>0.60</td>
<td>BALL DIMENSION</td>
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<tr>
<td>A2</td>
<td>2.31</td>
<td>2.41</td>
<td>2.51</td>
<td>PAD DIMENSION</td>
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<td>b</td>
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<tr>
<td>e</td>
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<td>F</td>
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<tr>
<td>G</td>
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<td></td>
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</tr>
<tr>
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<td>0.41</td>
<td>0.46</td>
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<tr>
<td>H2</td>
<td>1.35</td>
<td>2.00</td>
<td>2.05</td>
<td>MOLD CAP HT</td>
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<td></td>
</tr>
<tr>
<td>bbb</td>
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<tr>
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<tr>
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TOTAL NUMBER OF BALLS: 24

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**PACKAGE IN TRAY LOADING ORIENTATION**

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**SYMBOL**

A1: BALL HT
A2: BALL DIMENSION
b: BALL DIMENSION
b1: BALL DIMENSION
D: PACKAGE TOP VIEW
E: PACKAGE BOTTOM VIEW
F: PACKAGE SIDE VIEW
G: PACKAGE TRAY VIEW
H1: SUBSTRATE THK
H2: MOLD CAP HT
aaa: SUBSTRATE THK
bbb: MOLD CAP HT
ccc: BALL HT
ddd: BALL HT
eee: BALL HT

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**NOTES:**

3. BALL DESIGNATION PER JESD MS-028 AND JEP95
4. DETAILS OF PIN #1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. THE PIN #1 IDENTIFIER MAY BE EITHER A MOLD OR MARKED FEATURE
5. PRIMARY DATUM \(-Z\) IS SEATING PLANE

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**PACKAGE TOP VIEW**

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**PACKAGE BOTTOM VIEW**

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**PACKAGE SIDE VIEW**

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**PACKAGE TRAY VIEW**

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**PACKAGE IN TRAY LOADING ORIENTATION**

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