If one was good, two must be better! Poster Sessions that is! We had so many qualified submissions this year, we divided them into two Poster sessions offering a variety of relevant topics to augment what you'll learn sitting in the Podium sessions.

Poster Sessions are a great way to network through interaction with the poster presenters and other curious bystanders, multitask during a break and stretch your legs after a long session.

One Piece Stamped and Formed Probe Pin
Ichiro Fujishiro—Yamaichi Electronics

Correlation and Measuring Techniques for +/-5% Impedance
Tom Bresnan—R&D Altanova

Compliance Grounding -The Mechanical Importance of Grounding
Shamal Mundiyath—JF Microtechnology Sdn Bhd
One-Piece Stamped and Formed Probe Pin
Ichiro Fujishiro
Yamaichi Electronics

Key Industry Challenges:
• Pitches continue to shrink
• Test temperature and device current is increasing
• Cost continues to be a focus, even in demanding applications

Solution: One-Piece Stamped and Formed Probe Pin
• One-piece stamped and formed pin provides high current carrying capacity
• High volume stamping delivers high quality and low cost

Key Features
• 0.4mm minimum pitch
• Excellent electrical conductivity due to beryllium copper base material
• Stable contact force and resistance throughout pin life
• Excellent SI performance
• Excellent travel for 0.4mm pitch solution
• Compatible with current Burn In Socket Solutions

Additional Features:
• Supports non-magnetic probe applications
• Outstanding SI performance enables support for SLT, Test and Validation Applications

[Photo]

Device Side
PCB Side
**Specification**

- Contact Pitch: 0.4mm minimum
- Test Height: 5.05mm
- Operation Stroke: 0.65mm
- Contact Force: 14gf ± 5gf (0.137N ± 0.0049N)
- Spring Life: 80,000 times
- Operation Temperature: ~ -40 to 150°C

**Basic Performance**

**[Contact Force – Displacement – Resistance]**

**[Cycle Test]**

**Testing Condition**

- Temperature: Ambient
- Contact Object: Plate with Au plating
Current Carrying Capacity Comparison

[Measuring Method]
- Measure the temperature at the Barrel.
- Use higher temperature readings as data.

[Current condition]
- Current value: 1A, 2A, 3A
- Duty ratio: 5%, 10%, 25%, 50%, 75%, 100% (1Hz)

[Test Result]

**One Piece Pressed Probe Pin**

**Standard Four Piece Probe Pin**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Duty Ratio</th>
<th>5 %</th>
<th>10 %</th>
<th>25 %</th>
<th>50 %</th>
<th>75 %</th>
<th>100 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Piece Pressed Probe</td>
<td></td>
<td>3.7</td>
<td>6.6</td>
<td>14.7</td>
<td>28.7</td>
<td>37.4</td>
<td>50.1</td>
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<td>9.5</td>
<td>17.5</td>
<td>41.0</td>
<td>80.5</td>
<td>135.2</td>
<td>-</td>
</tr>
</tbody>
</table>

**Temperature Rise: [°C]**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Duty Ratio</th>
<th>5 %</th>
<th>10 %</th>
<th>25 %</th>
<th>50 %</th>
<th>75 %</th>
<th>100 %</th>
</tr>
</thead>
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<td>7.5</td>
<td>13.5</td>
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<td>89.2</td>
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</tbody>
</table>

**Temperature Rise:**
- < 30 °C
- 30-80 deg.C
- ≥ 80 deg.C