EM907 Solder Paste
Lead-Free, No-Clean

**Product Description**

EM907 is a lead-free, air and nitrogen refloorable no-clean solder paste specifically designed for the thermal requirements of lead-free alloys, including the Sn96.5Ag3.0Cu0.5 alloy. The paste flux system allows joint appearances that closely resemble that achieved with SnPb alloys. EM907 is capable of stencil printing downtimes up to 60 minutes with an effective first print down to 20 mils without any kneading. EM907 also exhibits excellent continual printability for fine pitch (0.4mm/16 mils) and is able to print at high speeds up to 6 in/s (150 mm/s). This solder paste also exceeds the reliability standards required by J-STD-004.

**Performance Characteristics:**

- Lead-free joints that closely resemble those achieved with SnPb solder paste
- Excellent solderability to a wide variety of surface metalizations, including NiAu, ImSn and ImAg
- High print speeds up to 150 mm/s
- Capable of 60 minute break times in printing
- Stencil life: 12+ hours (process dependent)
- Excellent printing characteristics to 16 and 20 mils pitch
- Excellent print and reflow characteristics for 0201 applications
- Stable tack life
- Classified as ROL0 per J-STD-004

**Standard Applications:**
88.5% Metal – Stencil Printing

**RoHS Compliance**

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2015/863 for the stated banned substances.

**Physical Properties**

Data given for Sn96.5Ag3.0Cu0.5, 88% metal, -325+500 mesh)

- **Viscosity (typical):** 1800 poise
  Malcom Viscometer @ 10rpm and 25°C
- **Initial Tackiness (typical):** 44 grams
  Tested to J-STD-005, IPC-TM-650, Method 2.4.44
- **Slump Test:** Pass
  Tested to J-STD-005, IPC-TM-650, Method 2.4.35
- **Solder Ball Test:** Preferred
  Tested to J-STD-005, IPC-TM-650, Method 2.4.43
- **Wetting Test:** Pass
  Tested to J-STD-005, IPC-TM-650, Method 2.4.45

**Reliability Properties**

- **Copper Mirror Corrosion:** Low
  Tested to J-STD-004, IPC-TM-650, Method 2.3.32
- **Corrosion Test:** Low
  Tested to J-STD-004, IPC-TM-650, Method 2.6.15
- **Silver Chromate:** Pass
  Tested to J-STD-004, IPC-TM-650, Method 2.3.33
- **Chloride and Bromides:** None
  Detected
  Tested to J-STD-004, IPC-TM-650, Method 2.3.35
- **Fluorides by Spot Test:** Pass
  Tested to J-STD-004, IPC-TM-650, Method 2.3.35.1
- **Surface Insulation Resistivity (SIR), (typical):** Pass
  Tested to J-STD-004, IPC-TM-650, Method 2.6.3.3

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<thead>
<tr>
<th></th>
<th>Blank</th>
<th>EM907</th>
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<tbody>
<tr>
<td>Day 1</td>
<td>1.1*10^6 Ω</td>
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<tr>
<td>Day 4</td>
<td>1.5*10^6 Ω</td>
<td>1.2*10^6 Ω</td>
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<tr>
<td>Day 7</td>
<td>1.4*10^6 Ω</td>
<td>1.4*10^6 Ω</td>
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Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet (SDS) and warning label before using this product.