

Solderability test of SMD type sensor elements

Assembly conditions

Layout of PCB: Benchmarker II 150µm (material FR4 35µm Cu, size 190.5 x 127 x 1.5mm)
 Tested PCB surfaces: chem. Ag, Cu OSP, NiAu, chem. Sn
 Solder Paste: F640 SA30C5-89 M30 (material SnAgCu 96.5/3.0/0.5)

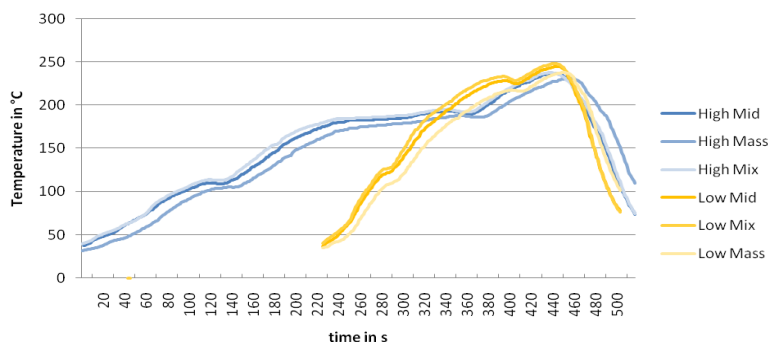
Tested elements

Pt 1000 SMD- V 0603
 Pt 1000 SMD- V 0805
 Pt 1000 SMD- V 1206

Solder conditions

Profiles: High and Low
 Atmosphere: Nitrogen and Air

Profiles High and Low



	Peak (max. temperature)		time above 217 °C in s	
	High	Low	High	Low
Mid ¹	237 °C	245 °C	60	92
Mass ²	231 °C	238 °C	49	68
Mix ³	238 °C	248 °C	65	103

- ¹ Mid: Position of temperature sensor in the middle of the PCB
- ² Mass: Position of temperature sensor at a big mass area on the PCB
- ³ Mix: Position of temperature sensors on right and left side on the PCB

Profile High: complete processing time 520 s
 Profile Low : complete processing time 280 s

Result

All tested samples showed a sufficient wetting under the described profiles High and Low, based on a visual soldering point inspection.

All given data should not be construed as guaranteeing specific properties of the product or its suitability for a specific particular application. The data are an extract from a test report with status from July 2010.

We reserve the right to make alterations and technical data printed. All technical data serves as a guideline and does not guarantee particular properties to any products.

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