## Typical Solder Process Example\*

- 1. Solder Paste Deposition
- · Solder paste should be selected based on application requirements.
- The recommended solder volume is 0.0016 0.0032 cubic inches (0.040 0.080 cubic mm) with a pad diameter of 0.020 - 0.028 inches (0.51 - 0.71mm).
- 2. Solder Reflow
- See profile.
- 3. Inspection and Testing
- Initial visual inspection for positioning of solder ball to pad along perimeter is recommended to verify reflow of balls.
- · Secondary X-Ray tests for overall continuity verification are recommended.
- For production applications, electrical MDA (Mfg. Defects Analysis) tests are recommended.

## **Generic Reflow Profile** 63Sn/37Pb Solder Liquidus@183°C (361°F) PEAK Normally the peak temperature is 20°-30°C above the alloy's liquidus and the time at temperature range 210°C 175°C COOL DOWN 145°C RAMP UP termine the fastest allowable Rate depends on ool down rate as determined PCB and by your PCB and components 115°C components 85°C 30°C 0 TIME IN MINUTES ------



95.5Sn/4.0Ag/0.5Cu Liquidus@218°C (424°F)



#### TIME IN MINUTES ------

\*Solder process recommendation is presented for guidance only. Factors such as different board sizes, densities, and equipment will change actual solder process requirements. Example presented should be used as a starting point only - actual solder process specifications should be developed based on individual requirements and capabilities.

# Generic Reflow Profiles



## Notes:

- These typical solder process examples are presented as a guideline for use with our BGA Socketing Systems in both Tin/Lead and Lead-free Reflow Profiles.
- A Generic Lead-free Solder Reflow Profile is provided as a guideline when using our products that feature the new Sn/Ag/Cu solder balls.
- Actual solder process requirements will be determined by the customer, based on the specific application.
- Contact our customer service department for application assistance and additional information.



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