

## **Low-Temperature Alloy Solution**

Improving Drop Shock Resistance

- More than two orders of magnitude better than Bi-containing low-temperature materials
- Performance equal to SAC305
- Ideal for step soldering

# **Durafuse**<sup>™</sup>**LT**

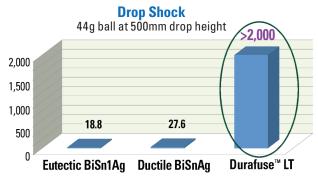
obtains the benefits of low-temperature processing-

reduced warpage and other negative effects on substrates and components—

without sacrificing reliability.



### **Improves Drop Shock Resistance**



#### \*Patented

Contact our expert: <a href="mailto:cnash@indium.com">cnash@indium.com</a> Learn more: <a href="mailto:www.indium.com/durafuse">www.indium.com/durafuse</a>

#### From One Engineer To Another

All of Indium Corporation's solder paste and preform manufacturing facilities are IATF 16949:2016 certified. Indium Corporation is an ISO 9001:2015 registered company.

# Opens the Door for Step Soldering

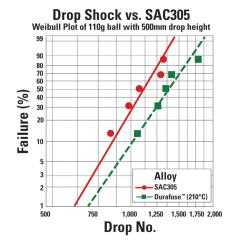
- Peak reflow below 210°C
- Shear strength retained above 150°C



120

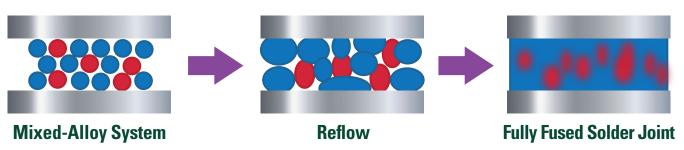






#### **Innovative Low-Temperature Alloy Technology**

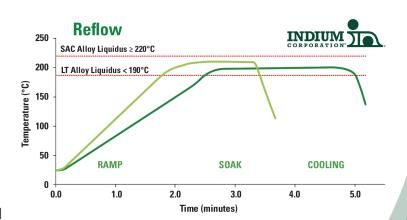
- Durafuse<sup>™</sup> LT is a novel mixed-alloy system, which solves the challenges of brittle bismuth-based low-temperature solder joints
  - The SnInAg alloy initiates solder joint formation at a low-temperature while the higher temperature SAC alloy provides enhanced strength and durability



#### **Durafuse™ LT Recommended Reflow**

Optimization of the reflow profile with a plateau at peak temperature is essential for maximizing drop shock reliability

- A 200°C peak reflow temperature requires a longer plateau region
- Increasing peak temperature to 205 or 210°C allows for reduced reflow time
- This profile is a general guideline in establishing a reflow profile for Durafuse™LT in Indium5.7LT-1



Contact our expert: cnash@indium.com Learn more: www.indium.com/durafuse

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