

# **BGA SOLDER SPHERES**

## **TECHNICAL DATA SHEET**

**PRODUCT DESCRIPTION:** Tin/Lead, Tin/Lead/Silver or Tin/Silver/Copper spheres made from virgin materials to meet the ever challenging demand of building or repairing fine pitch packages.

**AVAILABLE SIZES:** Nominal sizes are available from 0.08" (8 mil) to 0.045" (45 mil). However, please note not all sizes available in all alloys.  
Common Sizes: .045 (45 mil) .040 (40 mil) .035 (35 mil)  
.030 (30 mil) .025 (25 mil) .024 (24 mil) .022 (22 mil)  
.020 (20 mil) .018 (18 mil) .015 (15 mil) .014 (14 mil)  
.012 (12 mil) .010 (10 mil) .008 (8 mil)

### **SPECIFICATIONS**

**COMPOSITION:** Sn – 63, Pb – 37.  
Sn – 62, Pb – 36, Ag – 2.  
Sn – 96.5, Ag – 3.5  
Sn - 95.5, Ag - 4.0, Cu - 0.5

**IMPURITY LEVELS:** Levels of unnamed elements meet IPC and MIL specifications.

**MELTING POINTS:** 63/37 @ 183 +/- 2 DEG. C  
62/36/2Ag @ 179 +/- 2 DEG. C  
96.5/3.5Ag @ 221 +/- 2 DEG. C  
95.5/4.0Ag/.5Cu @ 217 – 219 +/- 2 DEG. C

**SIZE DISTRIBUTION:** 99% of the spheres lie within the size range:  
+/- 0.0005"  
99.95% of the spheres lie within the size range:  
+/- 0.001"

**SPHERICITY:** 99.95% of the spheres exceed 95% roundness factor.

\* The information contained herein is based on technical data which we believe to be reliable and is intended for use by persons having TECHNICAL SKILL, at their own risk. Users of our products should make their own tests to determine the suitability of each such product for their own particular process. AMTECH will assume no liability for results obtained or damages incurred through the application of the data presented. \*  
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