# 3M™ Textool™ BGA Test & Burn-In Sockets

1.00 mm, Types 0, I, II and III Open Top



- Double-beam normally-closed contact delivers balanced, opposing forces to solder ball with minimal shear stress
- Contact tips touch ball above its center plane producing only slight indentations and minimal ball deformation
- Allows excellent air flow around device
- Includes a retractable locating guide for easy board mounting even with hundreds of leads
- Compatible with most robotic handlers while it provides easy manual operation
- Accepts package body sizes up to 29 mm square with a maximum matrix of 27 x 27
- RoHS\* compliant

Date Modified: June 16, 2005

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# **Physical**

**Body Material:** Polyethersulfone (PES)

Flammability: UL 94V-0 Color: Black

Alignment Plate Material: Liquid Crystal Polymer (LCP)

Flammability: UL 94V-0 Color: Black

Contact Material: Beryllium Copper

Plating: 30μ" (0.76 μm) Gold over 50μ" (1.3 μm) Nickel

Other Metal Parts: Stainless Steel

### **Electrical**

**Insulation Resistance:**  $>1000M\Omega$  at 500 Vdc **Withstanding Voltage:** 500 Vrms at sea level

Initial Contact Resistance: <50m $\Omega$  measured at 1.0 mA applied current

Current Rating: 1.0 A max @ 25°C

### **Environmental**

**Operating Temperature Rating:** -55°C to +150°C

## Mechanical

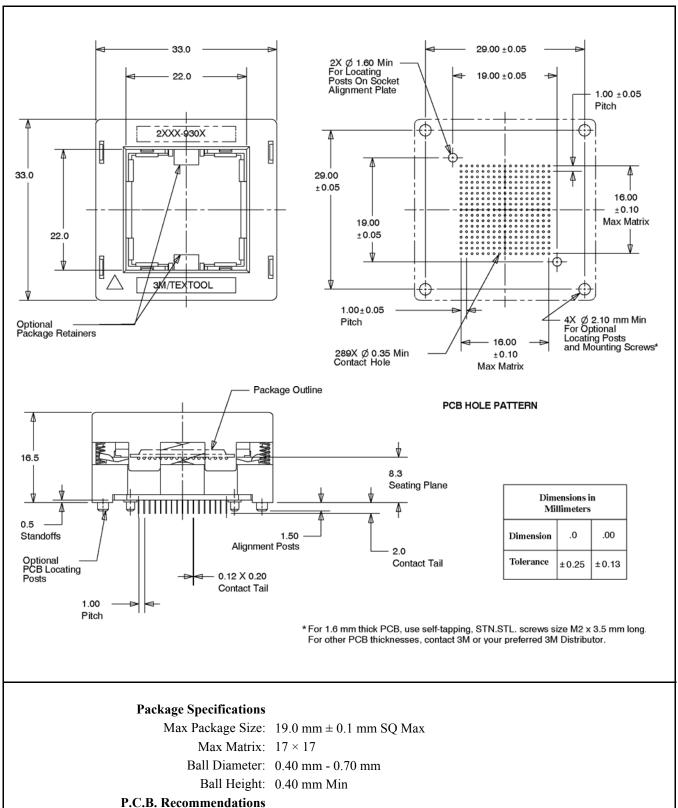
**Durability:** 20,000 actuations (10,000 devices load/unload) at room temperature

**Initial Contact Force:** 17 gf (0.17N) Nom for 0.6 mm diameter solder ball 14 gf (0.14N) Nom for 0.5 mm diameter solder ball

**Initial Actuation Force:** Type II-5Kgf @ full pin count

Contact Wiper Gap - Fully Open: 0.85 mm Nom

\* RoHS = Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment "RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or prolybromianted diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

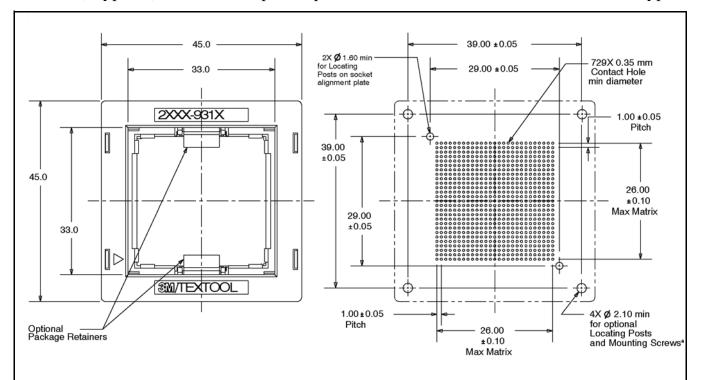


r.C.B. Recommendations

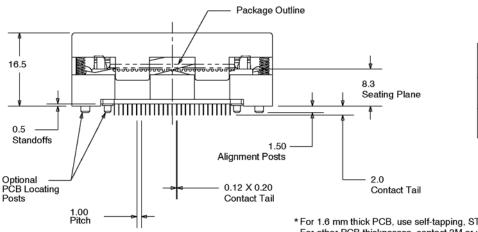
Board Thickness: 1.6 mm
Through Hole Diameter 0.35 mm Min

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Type I



### PCB HOLE PATTERN



Dimensions in Millimeters		
Dimension	.0	.00
Tolerance	±0.25	±0.13

\* For 1.6 mm thick PCB, use self-tapping, STN.STL. screws size M2 x 3.5 mm long For other PCB thicknesses, contact 3M or your preferred 3M Distributor.

## **Package Specifications**

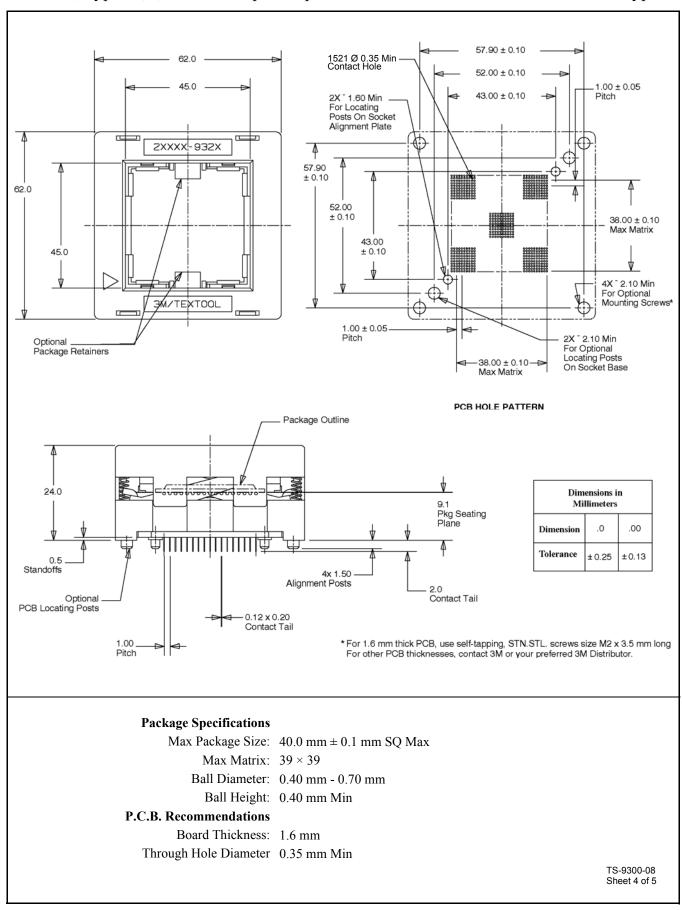
Max Package Size:  $29 \text{ mm} \pm 0.1 \text{ mm SQ Max}$ 

Max Matrix: 27 × 27 Max Ball Diameter: 0.40 mm - 0.70 mm Ball Height: 0.40 mm Min

#### P.C.B. Recommendations

Board Thickness: 1.6 mm
Through Hole Diameter 0.35 mm Min

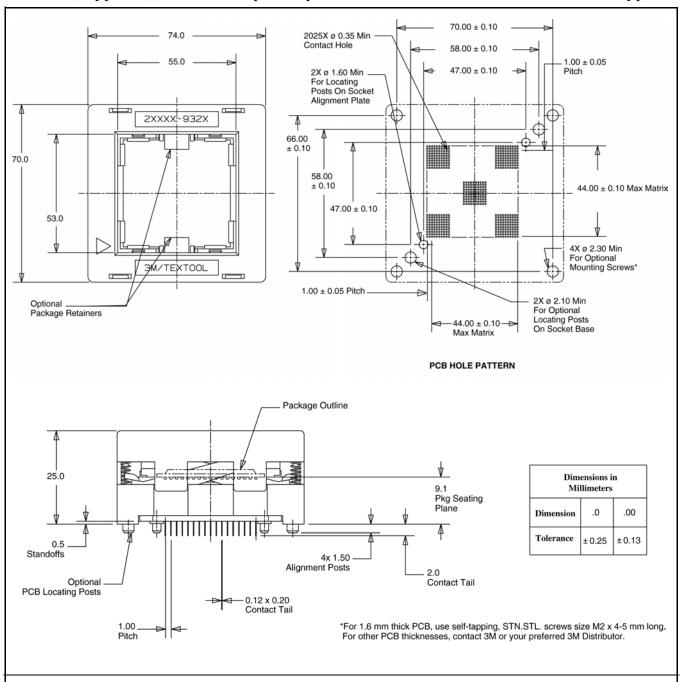
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# 3M™ Textool™ BGA Test & Burn-In Sockets

1.00 mm, Types 0, I, II and III Open Top

Type III



## **Package Specifications**

Max Package Size:  $47.5 \text{ mm} \pm 0.1 \text{ mm} \text{ SQ Max}$ 

Max Matrix:  $45 \times 45$ 

Ball Diameter: 0.50 mm - 0.70 mm Ball Height: 0.40 mm Min

### P.C.B. Recommendations

Board Thickness: 1.6 mm
Through Hole Diameter 0.35 mm Min

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Minimum 10% Post-Consumer Fiber Printed in USA.

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