

# 3M™ Textool™ Burn-In Grid ZIP Sockets

## Pin Grid Arrays



- Lever actuated zero insertion force mechanism
- Rugged 3-plate construction for durability and electrical reliability
- Available in 10 x 10 through 25 x 25 matrices
- PTFE coated stainless steel handle - durable and safe in high humidity environments
- Optical locating holes for robotics loading/unloading
- Repairable - contacts, handles, top-plate, and cam plate are replaceable

Date Modified: November 8, 2004

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## Physical

### Insulation

Material: Polyethersulfone (PES)  
Flammability: UL 94V-0  
Color: Black PES

**Marking:** Part Number Identifier and Logo on All

### Cam Handle

Material: Stainless Steel

### Contact

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

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## Electrical

**Current Rating:** 1 Amp  
**Insulation Resistance:**  $> 1 \times 10^{12}$  at 500 Vdc  
**Withstanding Voltage:** 1000 Vrms at sea level

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## Environmental

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

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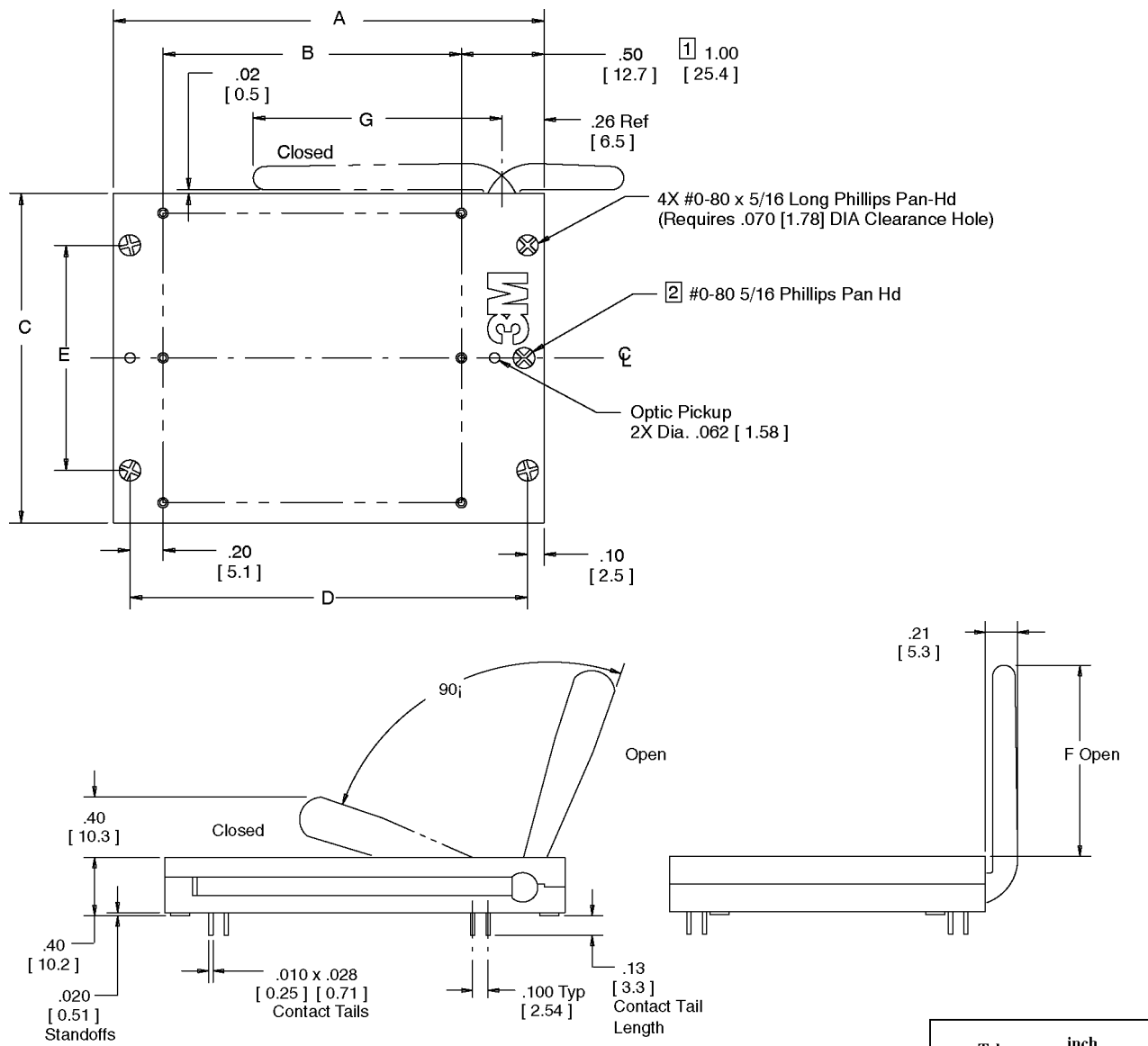
## Mechanical

**PES/BeCu** A. When used as a test socket at room temperature 24°C the socket will last 25,000 actuations.  
B. Based on field experience, under normal burn-in conditions up to a maximum of 150°C for PES, the socket should last an average of 4 years.

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	Tolerance	
	inch	mm
Dimension	.00 [.0]	.000 [.00]
Tolerance	±.010 [±.25]	±.005 [±.13]

Notes:  
 1 25 x 25 only.  
 2 Present only on 15 x 15 and larger

### Ordering Information

**2XXX - 63XX - XXX - 1902**

Number of Contacts

- 6310-10x10
- 6311-11x11
- 6313-13x13
- 6315-15x15
- 6317-17x17
- 6319-19x19
- 6321-21x21
- 6324-25x25

Plating PES:  
 1902 with /30µ" Au/Ni on BeCu

OUA = Molded Pattern  
 9UA = All holes open

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Note: Additional ten hole plugs can be ordered separately, part #200-4660-14-1900

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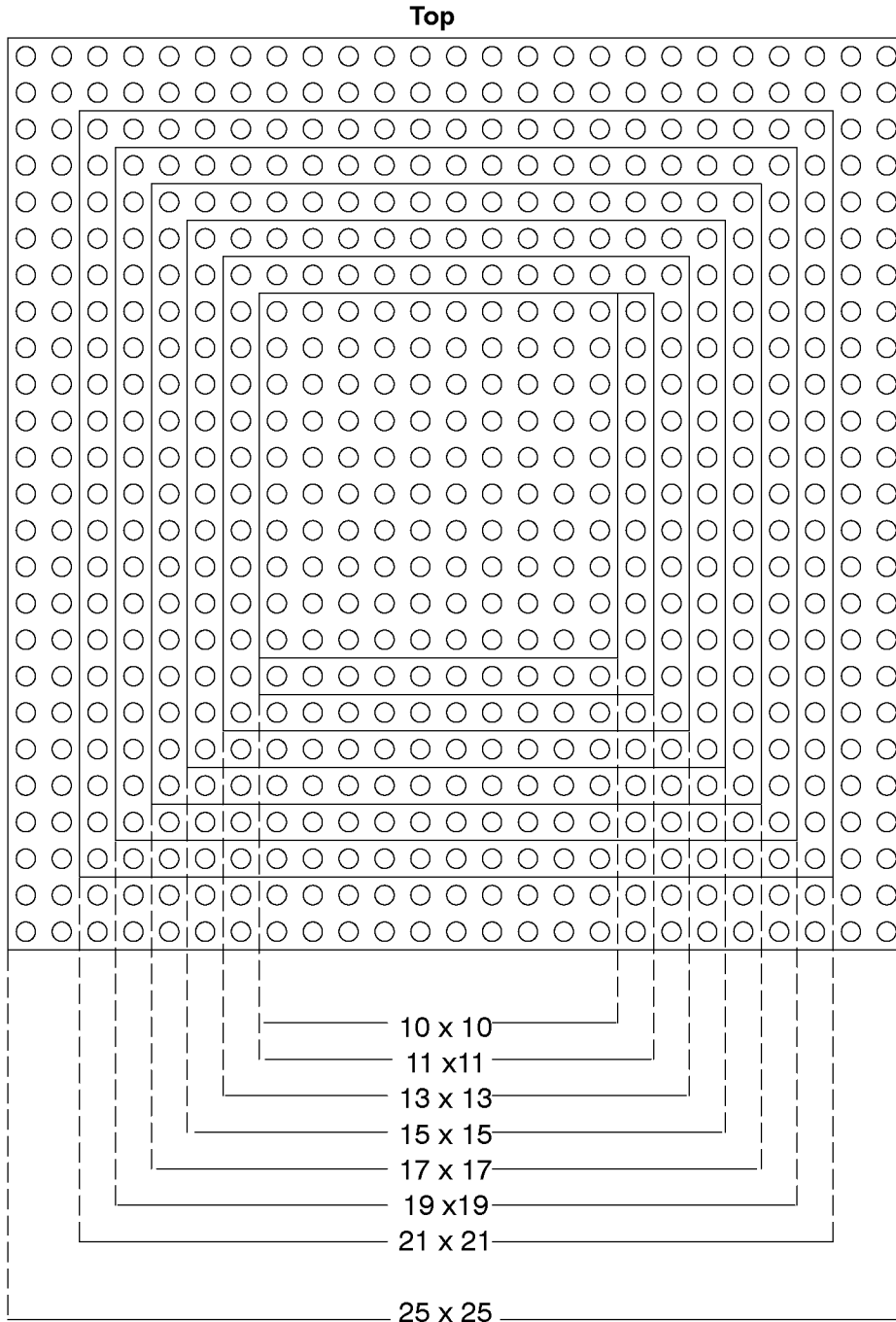
Grid Matrix	Maximum Contact Quantity	Dimensions						
		A	B	C	D	E	F	G
10 x 10	100	1.70 [ 43.2 ]	.90 [ 22.9 ]	1.15 [ 29.2 ]	1.50 [ 38.1 ]	.90 [ 22.9 ]	.80 [ 20.3 ]	.80 [ 20.3 ]
11 x 11	121	1.80 [ 45.7 ]	1.00 [ 25.4 ]	1.25 [ 31.8 ]	1.60 [ 40.6 ]	1.00 [ 25.4 ]	.80 [ 20.3 ]	.80 [ 20.3 ]
13 x 13	169	2.00 [ 50.8 ]	1.20 [ 31.8 ]	1.45 [ 36.8 ]	1.80 [ 45.7 ]	1.00 [ 25.4 ]	.80 [ 20.3 ]	.80 [ 20.3 ]
15 x 15	225	2.20 [ 55.9 ]	1.40 [ 35.6 ]	1.65 [ 41.9 ]	2.00 [ 50.8 ]	1.20 [ 30.5 ]	1.30 [ 33.0 ]	1.40 [ 35.6 ]
17 x 17	289	2.40 [ 61.0 ]	1.60 [ 40.6 ]	1.85 [ 47.0 ]	2.20 [ 55.9 ]	1.20 [ 30.5 ]	1.30 [ 33.0 ]	1.40 [ 35.6 ]
19 x 19	361	2.60 [ 66.0 ]	1.80 [ 45.7 ]	2.05 [ 52.1 ]	2.40 [ 61.0 ]	1.40 [ 35.6 ]	1.70 [ 43.2 ]	1.80 [ 45.7 ]
21 x 21	441	2.80 [ 71.1 ]	2.00 [ 50.8 ]	2.25 [ 57.2 ]	2.60 [ 66.0 ]	1.40 [ 35.6 ]	1.70 [ 43.2 ]	1.80 [ 45.7 ]
25 x 25	625	3.70 [ 94.0 ]	2.40 [ 61.0 ]	2.65 [ 67.3 ]	3.50 [ 88.9 ]	2.00 [ 50.8 ]	2.58 [ 65.5 ]	2.78 [ 70.6 ]

Tolerance $\frac{\text{inch}}{[\text{mm}]}$		
Dimension	$\frac{.00}{[.0]}$	$\frac{.000}{[.00]}$
Tolerance	$\frac{\pm .010}{[\pm .25]}$	$\frac{\pm .005}{[\pm .13]}$

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Pin Grid Arrays



Tolerance		
	inch	mm
Dimension	.00 [ .0 ]	.000 [ .00 ]
Tolerance	±.010 [ ± .25 ]	±.005 [ ± .13 ]

Handle Side

Mark Indications:

- X No holes, no contacts
- Holes only, no contacts
- Holes with contacts

**Notes:**

1. This is only a work sheet. Do not proceed with any layout until a part number is assigned by 3M. The pattern is subject to repositioning.
2. Lead diameter = .022 [ 0.56 ] max, .014 [ 0.36 ] min. The standard socket has been designed to accept these lead diameters only. For all others please consult the factory.
3. Use this sheet to indicate which positions you intend to use.
4. Remember: for best results, keep your patterns as symmetrical with the centerline as possible.
5. The contact point for all sizes is .085 [ 2.16 ] below the top surface and we recommend a device lead length of .100 [ 2.54 ] below the solder standoffs.

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# 3M

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