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 μ m) Gold over 50μ " (1.3 μ m) Nickel

Electrical

Current Rating: 1 Amp

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

Environmental

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

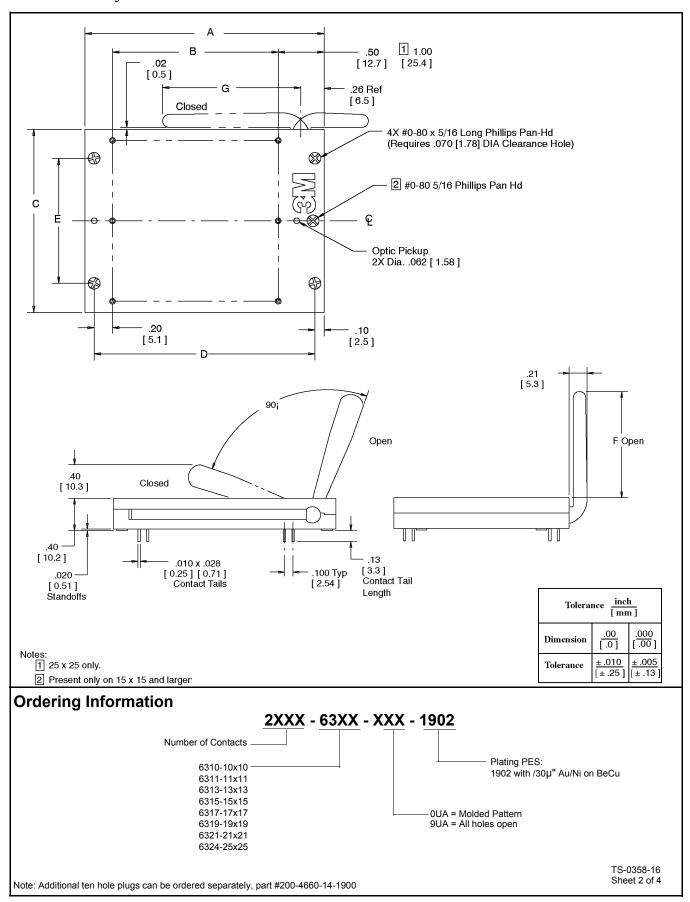
Mechanical

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.

> > Textool is a trademark of 3M Company.

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Grid	Maximum Contact Quantity	Dimensions							
Matrix		A	В	С	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 [27.1]	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]	

Tolera	Tolerance inch [mm]					
Dimension	<u>.00</u> [0.]	. <u>000</u> [00.]				
Tolerance	± .010 [± .25]	<u>± .005</u> [± .13]				

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Pin Grid Arrays

Тор	
000000000000000000000000000000000000000	Tolerance inch [mm]
000000000000000000000000000000000000000	Dimension .00 .000
	[.01] [.00]
	Tolerance $\begin{bmatrix} \pm .010 \\ [\pm .25] \end{bmatrix} \begin{bmatrix} \pm .005 \\ [\pm .13] \end{bmatrix}$
	Handle Side
10 x 10	
13 x 13	
15 x 15 17 x 17	
19 x19——————————————————————————————————	Mark Indications: X No holes, no contacts
21 x 21	 Holes only, no contacts
25 x 25	Holes with contacts
20 X 20	

Front

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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