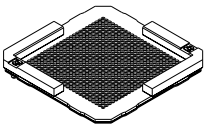
MATRIX BGA SOCKET TYPE 2 (1 MM)

PART NO.	NO. OF CONTACTS	GRID	DIM A	DIM B	DIM C	DIM D	DIM E	DIM G	LOAD
1640258-1	256	16X16	23.50 [.925]	17.50 [.689]	15.00 [.591]	38.10 [1.500]	20.90 [.823]	14.50 [.571]	25±6 LBS
1640258-2	289	17X17	24.50 [.964]	18.50 [.728]	16.00 [.630]	38.10 [1.500]	21.90 [.862]	15.50 [.610]	29±7 LBS
1640258-3	324	18X18	25.50 [1.004]	19.50 [.768]	17.00 [.669]	38.10 [1.500]	22.90 [.902]	16.50 [.650]	32±8 LBS
1640258-4	361	19X19	26.50 [1.043]	20.50 [.807]	18.00 [.709]	38.10 [1.500]	23.90 [.941]	17.50 [.689]	36±9 LBS
1640258-5	400	20X20	27.50 [1.083]	21.50 [.846]	19.00 [.748]	38.10 [1.500]	24.90 [.980]	18.50 [.728]	40±10 LBS
1640258-6	441	21X21	29.50 [1.161]	23.50 [.925]	20.00 [.787]	38.10 [1.500]	26.90 [1.059]	20.50 [.807]	44±11 LBS
1640258-7	484	22X22	29.50 [1.161]	23.50 [.925]	21.00 [.827]	38.10 [1.500]	26.90 [1.059]	20.50 [.807]	48±12 LBS
1640258-8	529	23X23	31.50 [1.240]	25.50 [1.004]	22.00 [.866]	38.10 [1.500]	28.90 [1.138]	22.50 [.886]	52±13 LBS
1640258-9	576	24X24	31.50 [1.240]	25.50 [1.004]	23.00 [.905]	38.10 [1.500]	28.90 [1.138]	22.50 [.886]	57±14 LBS
1-1640258-0	625	25X25	33.50 [1.319]	27.50 [1.083]	24.00 [.945]	38.10 [1.500]	30.90 [1.216]	24.50 [.964]	62±16 LBS
1-1640258-1	676	26X26	33.50 [1.319]	27.50 [1.083]	25.00 [.984]	38.10 [1.500]	30.90 [1.216]	24.50 [.964]	67±17 LBS
1-1640258-2	729	27X27	35.50 [1.398]	29.50 [1.161]	26.00 [1.024]	38.10 [1.500]	32.90 [1.295]	26.50 [1.043]	72±18 LBS
1-1640258-3	784	28X28	35.50 [1.398]	29.50 [1.161]	27.00 [1.063]	38.10 [1.500]	32.90 [1.295]	26.50 [1.043]	78±19 LBS
1-1640258-4	841	29X29	37.50 [1.476]	31.50 [1.240]	28.00 [1.102]	50.80 [2.000]	34.90 [1.374]	28.50 [1.122]	83±21 LBS
1-1640258-5	900	30X30	37.50 [1.476]	31.50 [1.240]	29.00 [1.142]	50.80 [2.000]	34.90 [1.374]	28.50 [1.122]	89±22 LBS
1-1640258-6	961	31X31	39.50 [1.555]	33.50 [1.319]	30.00 [1.181]	50.80 [2.000]	36.90 [1.453]	30.50 [1.200]	95±24 LBS
1-1640258-7	1024	32X32	39.50 [1.555]	33.50 [1.319]	31.00 [1.220]	50.80 [2.000]	36.90 [1.453]	30.50 [1.200]	102±25 LBS
1-1640258-8	1089	33X33	41.50 [1.634]	35.50 [1.398]	32.00 [1.260]	50.80 [2.000]	38.90 [1.531]	32.50 [1.279]	108±27 LBS
1-1640258-9	1156	34X34	41.50 [1.634]	35.50 [1.398]	33.00 [1.299]	50.80 [2.000]	38.90 [1.531]	32.50 [1.279]	115±29 LBS
2-1640258-0	1225	35X35	44.00 [1.732]	38.00 [1.496]	34.00 [1.338]	50.80 [2.000]	41.40 [1.630]	35.00 [1.378]	122±30 LBS
2-1640258-1	1296	36X36	44.00 [1.732]	38.00 [1.496]	35.00 [1.378]	50.80 [2.000]	41.40 [1.630]	35.00 [1.378]	129±32 LBS
2-1640258-2	1369	37X37	44.50 [1.752]	38.50 [1.516]	36.00 [1.417]	50.80 [2.000]	41.90 [1.650]	35.50 [1.398]	136±34 LBS
2-1640258-3	1444	38X38	46.50 [1.831]	40.50 [1.594]	37.00 [1.457]	50.80 [2.000]	43.90 [1.728]	37.50 [1.476]	143±36 LBS
2-1640258-4	1521	39X39	46.50 [1.831]	40.50 [1.594]	38.00 [1.496]	50.80 [2.000]	43.90 [1.728]	37.50 [1.476]	151±38 LBS
2-1640258-5	1600	40X40	49.00 [1.929]	43.00 [1.693]	39.00 [1.535]	62.00 [2.441]	46.40 [1.827]	40.00 [1.575]	159±40 LBS
2-1640258-6	1681	41X41	49.50 [1.949]	43.50 [1.713]	40.00 [1.575]	62.00 [2.441]	46.90 [1.846]	40.50 [1.594]	167±42 LBS
2-1640258-7	1764	42X42	49.50 [1.949]	43.50 [1.713]	41.00 [1.614]	62.00 [2.441]	46.90 [1.846]	40.50 [1.594]	175±44 LBS
2-1640258-8	1849	43X43	51.50 [2.027]	45.50 [1.791]	42.00 [1.653]	62.00 [2.441]	48.90 [1.925]	42.50 [1.673]	183±46 LBS
2-1640258-9	1936	44X44	51.50 [2.027]	45.50 [1.791]	43.00 [1.693]	62.00 [2.441]	48.90 [1.925]	42.50 [1.673]	192±48 LBS
3-1640258-0	2025	45X45	54.00 [2.126]	48.00 [1.890]	44.00 [1.732]	62.00 [2.441]	51.40 [2.024]	45.00 [1.772]	201±50 LBS
3-1640258-1	2116	46X46	54.00 [2.126]	48.00 [1.890]	45.00 [1.772]	62.00 [2.441]	51.40 [2.024]	45.00 [1.772]	210±52 LBS
3-1640258-2	2209	47X47	54.00 [2.126]	48.00 [1.890]	46.00 [1.811]	62.00 [2.441]	51.40 [2.024]	45.00 [1.772]	219±55 LBS
3-1640258-3	2304	48X48	56.50 [2.224]	50.50 [1.988]	47.00 [1.850]	62.00 [2.441]	53.90 [2.122]	47.50 [1.870]	229±57 LBS
3-1640258-4	2401	49X49	56.50 [2.224]	50.50 [1.988]	48.00 [1.890]	62.00 [2.441]	53.90 [2.122]	47.50 [1.870]	238±60 LBS
3-1640258-5	2500	50X50	57.50 [2.264]	51.50 [2.028]	49.00 [1.929]	62.00 [2.441]	54.90 [2.161]	48.50 [1.909]	248±62 LBS
ALTERNATE SIZES									
3-1640258-6	256	16X16	24.50 [.964]	18.50 [.728]	15.00 [.591]	38.10 [1.500]	21.90 [.862]	15.50 [.610]	25±6 LBS
3-1640258-7	289	17X17	25.50 [1.004]	19.50 [.768]	16.00 [.630]	38.10 [1.500]	22.90 [.902]	16.50 [.650]	29±7 LBS
3-1640258-8	324	18X18	26.50 [1.043]	20.50 [.807]	17.00 [.669]	38.10 [1.500]	23.90 [.941]	17.50 [.689]	32±8 LBS
3-1640258-9	361	19X19	27.50 [1.083]	21.50 [.846]	18.00 [.709]	38.10 [1.500]	24.90 [.980]	18.50 [.728]	36±9 LBS
4-1640258-0	576	24X24	33.50 [1.319]	27.50 [1.083]	23.00 [.906]	38.10 [1.500]	30.90 [1.217]	24.50 [.965]	57±14 LBS



SPECIFICATIONS:

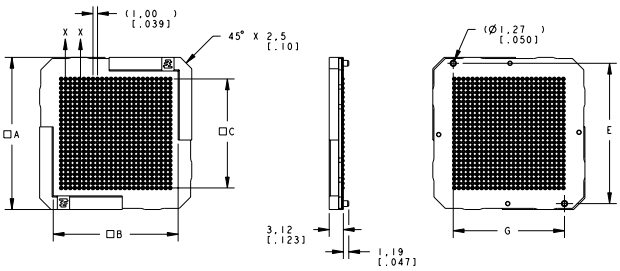
MATERIALS:
CONDUCTIVE COLUMN: HXC-125.
INSULATOR: POLYIMIDE.
FRAME: 94V-0 ULTEM.

MECHANICAL:
MPI TOTAL LOAD: SEE CHART

APPLICATION:
THIS SOCKET IS DESIGNED FOR COMPRESSION MOUNT.
FOR MORE INFORMATION REFERENCE MPI APPLICATION GUIDE, P/N 1640905 (BGA).

NOTES: UNLESS OTHERWISE SPECIFIED

1. INTERPRET DRAWING PER ASME Y14.5M-1994.
2. DOES NOT INCLUDE VESTIGE OR SURFACE ENRICHMENT.
3. THE SOLDER MASK ON THE PCB ARRAY MUST BE NO MORE THAN 15 MICRO METERS THICK.
4. STANDARD CHEMICAL GOLD PLATING IS ACCEPTABLE FOR PCB FAB IN THE USE OF THIS SOCKET.
5. RoHS COMPLIANT AND CERTIFIED.



PRELIMINARY

CUSTOMER DRAWING

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

REVISION IND.	REV.	
PRELIMINARY OSLO-0001-03 W.A. 11-13-02 APP.D: W.A. 11-13-02	1	
PRELIMINARY OSLO-0332-02 W.A. 12-12-02 APP.D: W.A. 12-12-02	2	
PRELIMINARY OSLO-0127-02 LS 12-13-02 APP.D: W.A. 12-20-02	3	
PRELIMINARY OSLO-0001-03 LS 1-2-03 APP.D: W.A. 1-20-03	4	
PRELIMINARY OSLO-0127-02 BPF 3-21-03 APP.D: W.A. 3-28-03	5	
PRELIMINARY OSLO-0106-03 LS 4-4-03 APP.D: BA 4-7-03	6	
PRELIMINARY OSLO-0106-03 LS 4-8-03 APP.D: BA 4-8-03	7	
PRELIMINARY OSLO-0127-03 LS 4-15-03 APP.D: BA 4-15-03	8	
PRELIMINARY OSLO-0106-03 LS 8-4-03 APP.D: BA 8-5-03	9	
PRELIMINARY CCO-08-0084 LS 2-19-08 APP.D: BPF 2-29-08	10	
PRELIMINARY OSLO-0106-03 DM 7-24-08 APP.D: DM 7-24-08	11	

DO NOT SCALE

Tyco Electronics — Norwood, Massachusetts 02062

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: X.X ± .25, X.XX ± .13, X.XXX ± .050, ANGLES ± 5°

DRAWN BY: W. ALDEN — DATE: 11-15-02
ENGINEER: W. ALDEN — DATE: 12-12-02
FILENAME: C-1640258 — PROJECT: MATRIX — SYSTEM: PRO-E

MATERIAL: N/A
FINISH: N/A

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DIMENSIONS ARE IN: MILLIMETERS
THIRD ANGLE PROJECTION
SCALE: 2:1
SIZE: C

TITLE: CUSTOMER DRAWING, SOCKET ASSEMBLY, 1 MM BGA, TYPE 2

TE PART NO.: SEE TABLE
SHEET 1 OF 2
DWG. NO.: C-1640258
REV. 11

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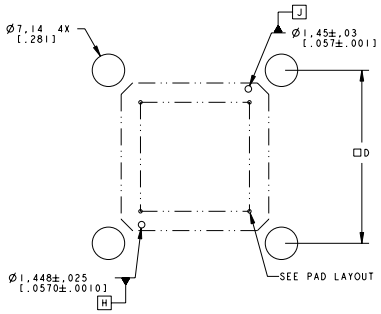
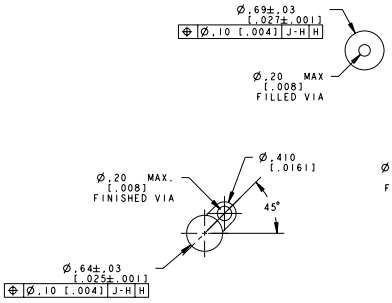
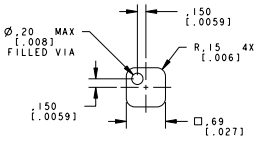


PCB FOOTPRINT





RECOMMENDED PCB PADS
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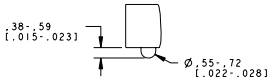
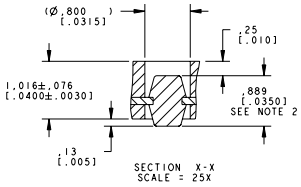


TYPE 2 BGA PACKAGE SPEC.
SCALE = 10X



SECTION X-X
SCALE = 25X

CUSTOMER DRAWING
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

REVISION IND: LTR:
PRELIMINARY
SEE SHEET 1

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UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: X.X ± .25, X.XX ± .13, X.XXX ± .050, ANGLES ± 5°	DRAWN BY: W. ALDEN	DATE: 11-15-02	MATERIAL: N/A
	ENGINEER: W. ALDEN	DATE: 12-12-02	FINISH: N/A
	FILENAME: C-1640258	PROJECT: MATRIX	SYSTEM: PRO-E

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DIMENSIONS ARE IN: MILLIMETERS
SCALE: 2:1
THIRD ANGLE PROJECTION
SIZE: C

TITLE: CUSTOMER DRAWING, SOCKET ASSEMBLY, 1 MM BGA, TYPE 2

TE PART NO.: SEE TABLE
SHEET 2 of 2
DWG. NO.: C-1640258
REV. 11

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