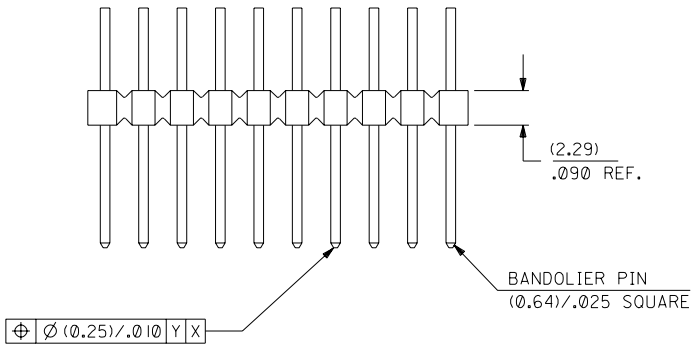
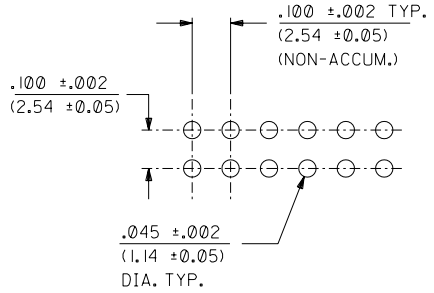
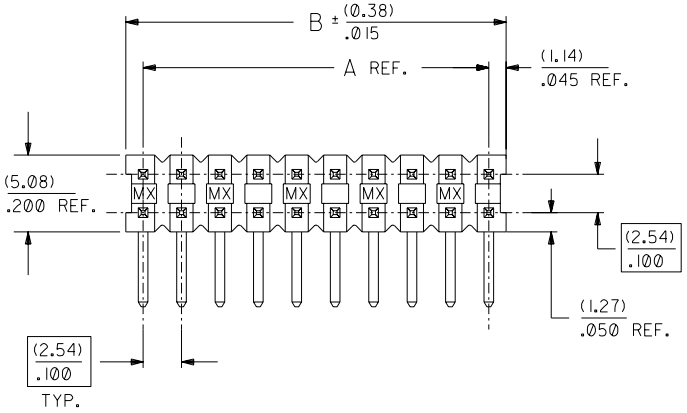
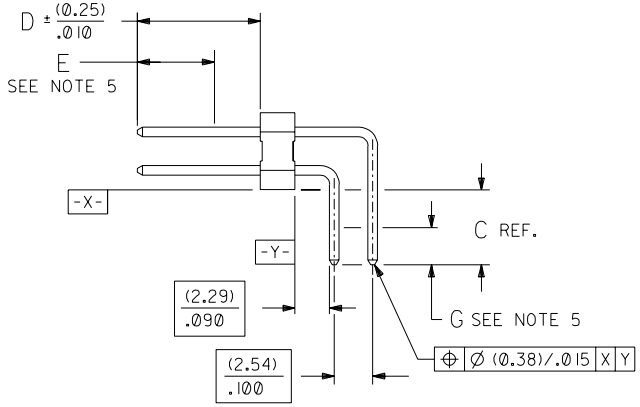




RECOMMENDED P.C. BOARD HOLE LAYOUT





CKT. SIZE	DIM. A REF. (MM)	DIM. A REF. INCH	DIM. B REF. (MM)	DIM. B REF. INCH
4	(2.54)	.100	(4.83)	.190
6	(5.08)	.200	(7.37)	.290
8	(7.62)	.300	(9.91)	.390
10	(10.16)	.400	(12.45)	.490
12	(12.70)	.500	(14.99)	.590
14	(15.24)	.600	(17.53)	.690
16	(17.78)	.700	(20.07)	.790
18	(20.32)	.800	(22.61)	.890
20	(22.86)	.900	(25.15)	.990
22	(25.40)	1.000	(27.69)	1.090
24	(27.94)	1.100	(30.23)	1.190
26	(30.48)	1.200	(32.77)	1.290
28	(33.02)	1.300	(35.31)	1.390
30	(35.56)	1.400	(37.85)	1.490
32	(38.10)	1.500	(40.39)	1.590
34	(40.64)	1.600	(42.93)	1.690
36	(43.18)	1.700	(45.47)	1.790
38	(45.72)	1.800	(48.01)	1.890
40	(48.26)	1.900	(50.55)	1.990
42	(50.80)	2.000	(53.09)	2.090
44	(53.34)	2.100	(55.63)	2.190
46	(55.88)	2.200	(58.17)	2.290
48	(58.42)	2.300	(60.71)	2.390
50	(60.96)	2.400	(63.25)	2.490
52	(63.50)	2.500	(65.79)	2.590
54	(66.04)	2.600	(68.33)	2.690
56	(68.58)	2.700	(70.87)	2.790
58	(71.12)	2.800	(73.41)	2.890
60	(73.66)	2.900	(75.95)	2.990
62	(76.20)	3.000	(78.49)	3.090
64	(78.74)	3.100	(81.03)	3.190
66	(81.28)	3.200	(83.57)	3.290
68	(83.82)	3.300	(86.11)	3.390
70	(86.36)	3.400	(88.65)	3.490
72	(88.90)	3.500	(91.19)	3.590
74	(91.44)	3.600	(93.73)	3.690
76	(93.98)	3.700	(96.27)	3.790
78	(96.52)	3.800	(98.81)	3.890
80	(99.06)	3.900	(101.35)	3.990

NOTES:

1 - PIN PUSHOUT FORCE: 4 LBS. MINIMUM
2 - FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE IS SHOWN.
3 - PINS MUST MEET SOLDERABILITY SPEC. ES-152, EXCEPT VOIDS ARE PERMISSIBLE AT BANDOLIER PIN FAYING SURFACE. (APPROX. .025 LNG X .006 WD. REF.) - 2 LOCATIONS
4 - WAFER TO BE FLAT WITHIN (0.03 MM/CM)/.003 IN./IN.
5 - MEASURE POINT FOR PLATING THICKNESS.
6 - THIS PRODUCT CONFORMS TO MOLEX PRODUCT SPEC. PS-70203.
7 - FOR ASSEMBLIES WITH VOIDS, REFER TO DRAWING NUMBER SDA-70203-5001-9999.
8 - PACKAGING INFORMATION:
(UNLESS OTHERWISE NOTED IN TABLES)

CIRCUIT SIZE	PACKAGING DRAWING
4 THROUGH 8	PK-70873-0353
10 AND OVER	PK-70873-0075

FINISH:

TIN - .000150 MINIMUM TIN PLATE OVER NICKEL PLATE.
15 GOLD - .000015 MINIMUM GOLD PLATE IN SELECT AREA, .000075 MINIMUM TIN PLATE IN SELECT AREA, OVER NICKEL PLATE OVERALL.
30 GOLD - .000030 MINIMUM GOLD PLATE IN SELECT AREA, .000075 MINIMUM TIN PLATE IN SELECT AREA, OVER NICKEL PLATE OVERALL.

*THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.

MATERIAL:

WAFER - G.F. POLYESTER; 94V-0; COLOR: BLACK
PIN - PHOSPHOR BRONZE

MFG.	SH.	REV.	LTR.	REVISIONS
	2	D	D	LEAD FREE UCP2004-1770 RWHITE 04/04/23
	1	D	C1	REVISE PKGNG ECN UDT2000-0949 SCHAFER 00/4/6
			C	REVISED PER ECN # U60711 1/8/96 BJS/RCB
			B1	ADDED EDP #'S PER ECR # U60256 95/08/23 CAC
			B	VOIDED EDP NO'S PER ECR # U60097 95/07/27 CAC
			A	RELEASED PER ECR # U31656 11/18/93 REED

▽ = 0 ▼ = 0 REVISE ONLY ON CAD SYSTEM

DIMENSIONS SHOWN (METRIC) INCH
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°

	INCH	METRIC
3 PLACE	± .005	---
2 PLACE	± .01	± 0.13
1 PLACE	---	± 0.25

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

TITLE: SALES ASSY-DUAL ROW WAFER W/BREAK-OFF OPTION RIGHT ANGLE/.025 SQ PINS

molex MOLEX INCORPORATED LISLE,ILL. 60532 U.S.A.
SHEET NO. 1 OF 2
DATE 11/18/93
PART NO. SEE CHART
DRWG. NO. SDA-70203-0001-5000

DRWG. BY	CHK'D. BY	APP'D. BY
SMR	SMR	

SCALE 4:1
FILE NAME ST0203X1
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.
DIV. DA
SIZE C

70203

ENGINEERING NUMBER A-70203	RELEASE FOR MANUFACTURE		EXPOSED PIN DIM. C REF.	EXPOSED PIN DIM. D ± (0.25) .010					PLATING PER NOTES SHEET 1	CONNECTOR END PLATING TYPE	CONNECTOR END PLATING E MEAS.		P.C. BOARD END PLATING TYPE	P.C. BOARD END PLATING G MEAS.		FOR PKG. INFO. SEE NOTE 8, SHEET 1	
-0001/-0039	R.F.M.		(2.79) .110	(6.10) .240					TIN	TIN	(2.54) .100		TIN	(1.27) .050			
-0040/-0078	R.F.M.		(2.79) .110	(8.13) .320					TIN	TIN	(4.57) .180		TIN	(1.27) .050			
-0079/-0117	R.F.M.		(4.45) .175	(6.10) .240					TIN	TIN	(2.54) .100		TIN	(1.27) .050			
-0157/-0195	R.F.M.		(2.79) .110	(6.10) .240					15 GOLD	GOLD	(2.54) .100		TIN	(1.27) .050			
-0196/-0234	R.F.M.		(2.79) .110	(8.13) .320					15 GOLD	GOLD	(4.57) .180		TIN	(1.27) .050			
-0313/-0351	R.F.M.		(2.79) .110	(6.10) .240					30 GOLD	GOLD	(2.54) .100		TIN	(1.27) .050			
-0352/-0390	R.F.M.		(2.79) .110	(8.13) .320					30 GOLD	GOLD	(4.57) .180		TIN	(1.27) .050			

CKTS	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	CKTS
04	10-88-1045	A-70203-0001	10-88-1046	A-70203-0040			10-89-1046	A-70203-0157	10-89-1047	A-70203-0196	10-89-2046	A-70203-0313	10-89-2047	A-70203-0352	04
06	10-88-1065	A-70203-0002	10-88-1066	A-70203-0041			10-89-1066	A-70203-0158	10-89-1067	A-70203-0197	10-89-2066	A-70203-0314	10-89-2067	A-70203-0353	06
08	10-88-1085	A-70203-0003	10-88-1086	A-70203-0042			10-89-1086	A-70203-0159	10-89-1087	A-70203-0198	10-89-2086	A-70203-0315	10-89-2087	A-70203-0354	08
10	10-88-1105	A-70203-0004	10-88-1106	A-70203-0043			10-89-1106	A-70203-0160	10-89-1107	A-70203-0199	10-89-2106	A-70203-0316	10-89-2107	A-70203-0355	10
12	10-88-1125	A-70203-0005	10-88-1126	A-70203-0044			10-89-1126	A-70203-0161	10-89-1127	A-70203-0200	10-89-2126	A-70203-0317	10-89-2127	A-70203-0356	12
14	10-88-1145	A-70203-0006	10-88-1146	A-70203-0045			10-89-1146	A-70203-0162	10-89-1147	A-70203-0201	10-89-2146	A-70203-0318	10-89-2147	A-70203-0357	14
16	10-88-1165	A-70203-0007	10-88-1166	A-70203-0046			10-89-1166	A-70203-0163	10-89-1167	A-70203-0202	10-89-2166	A-70203-0319	10-89-2167	A-70203-0358	16
18	10-88-1185	A-70203-0008	10-88-1186	A-70203-0047			10-89-1186	A-70203-0TIN	10-89-1187	A-70203-0203	10-89-2186	A-70203-0320	10-89-2187	A-70203-0359	18
20	10-88-1205	A-70203-0009	10-88-1206	A-70203-0048			10-89-1206	A-70203-0165	10-89-1207	A-70203-0204	10-89-2206	A-70203-0321	10-89-2207	A-70203-0360	20
22	10-88-1225	A-70203-0010	10-88-1226	A-70203-0049			10-89-1226	A-70203-0166	10-89-1227	A-70203-0205	10-89-2226	A-70203-0322	10-89-2227	A-70203-0361	22
24	10-88-1245	A-70203-0011	10-88-1246	A-70203-0050			10-89-1246	A-70203-0167	10-89-1247	A-70203-0206	10-89-2246	A-70203-0323	10-89-2247	A-70203-0362	24
26	10-88-1265	A-70203-0012	10-88-1266	A-70203-0051			10-89-1266	A-70203-0168	10-89-1267	A-70203-0207	10-89-2266	A-70203-0324	10-89-2267	A-70203-0363	26
28	10-88-1285	A-70203-0013	10-88-1286	A-70203-0052			10-89-1286	A-70203-0169	10-89-1287	A-70203-0208	10-89-2286	A-70203-0325	10-89-2287	A-70203-0364	28
30	10-88-1305	A-70203-0014	10-88-1306	A-70203-0053			10-89-1306	A-70203-0170	10-89-1307	A-70203-0209	10-89-2306	A-70203-0326	10-89-2307	A-70203-0365	30
32	10-88-1325	A-70203-0015	10-88-1326	A-70203-0054			10-89-1326	A-70203-0171	10-89-1327	A-70203-0210	10-89-2326	A-70203-0327	10-89-2327	A-70203-0366	32
34	10-88-1345	A-70203-0016	10-88-1346	A-70203-0055			10-89-1346	A-70203-0172	10-89-1347	A-70203-0211	10-89-2346	A-70203-0328	10-89-2347	A-70203-0367	34
36	10-88-1365	A-70203-0017	10-88-1366	A-70203-0056			10-89-1366	A-70203-0173	10-89-1367	A-70203-0212	10-89-2366	A-70203-0329	10-89-2367	A-70203-0368	36
38	10-88-1385	A-70203-0018	10-88-1386	A-70203-0057			10-89-1386	A-70203-0174	10-89-1387	A-70203-0213	10-89-2386	A-70203-0330	10-89-2387	A-70203-0369	38
40	10-88-1405	A-70203-0019	10-88-1406	A-70203-0058			10-89-1406	A-70203-0175	10-89-1407	A-70203-0214	10-89-2406	A-70203-0331	10-89-2407	A-70203-0370	40
42	10-88-1425	A-70203-0020	10-88-1426	A-70203-0059			10-89-1426	A-70203-0176	10-89-1427	A-70203-0215	10-89-2426	A-70203-0332	10-89-2427	A-70203-0371	42
44	10-88-1445	A-70203-0021	10-88-1446	A-70203-0060			10-89-1446	A-70203-0177	10-89-1447	A-70203-0216	10-89-2446	A-70203-0333	10-89-2447	A-70203-0372	44
46	10-88-1465	A-70203-0022	10-88-1466	A-70203-0061			10-89-1466	A-70203-0178	10-89-1467	A-70203-0217	10-89-2466	A-70203-0334	10-89-2467	A-70203-0373	46
48	10-88-1485	A-70203-0023	10-88-1486	A-70203-0062			10-89-1486	A-70203-0179	10-89-1487	A-70203-0218	10-89-2486	A-70203-0335	10-89-2487	A-70203-0374	48
50	10-88-1505	A-70203-0024	10-88-1506	A-70203-0063			10-89-1506	A-70203-0180	10-89-1507	A-70203-0219	10-89-2506	A-70203-0336	10-89-2507	A-70203-0375	50
52	10-88-1525	A-70203-0025	10-88-1526	A-70203-0064			10-89-1526	A-70203-0181	10-89-1527	A-70203-0220	10-89-2526	A-70203-0337	10-89-2527	A-70203-0376	52
54	10-88-1545	A-70203-0026	10-88-1546	A-70203-0065			10-89-1546	A-70203-0182	10-89-1547	A-70203-0221	10-89-2546	A-70203-0338	10-89-2547	A-70203-0377	54
56	10-88-1565	A-70203-0027	10-88-1566	A-70203-0066			10-89-1566	A-70203-0183	10-89-1567	A-70203-0222	10-89-2566	A-70203-0339	10-89-2567	A-70203-0378	56
58	10-88-1585	A-70203-0028	10-88-1586	A-70203-0067			10-89-1586	A-70203-0184	10-89-1587	A-70203-0223	10-89-2586	A-70203-0340	10-89-2587	A-70203-0379	58
60	10-88-1605	A-70203-0029	10-88-1606	A-70203-0068			10-89-1606	A-70203-0185	10-89-1607	A-70203-0224	10-89-2606	A-70203-0341	10-89-2607	A-70203-0380	60
62	10-88-1625	A-70203-0030	10-88-1626	A-70203-0069			10-89-1626	A-70203-0186	10-89-1627	A-70203-0225	10-89-2626	A-70203-0342	10-89-2627	A-70203-0381	62
64	10-88-TIN5	A-70203-0031	10-88-TIN6	A-70203-0070			10-89-TIN6	A-70203-0187	10-89-TIN7	A-70203-0226	10-89-2646	A-70203-0343	10-89-2647	A-70203-0382	64
66	10-88-1665	A-70203-0032	10-88-1666	A-70203-0071			10-89-1666	A-70203-0188	10-89-1667	A-70203-0227	10-89-2666	A-70203-0344	10-89-2667	A-70203-0383	66
68	10-88-1685	A-70203-0033	10-88-1686	A-70203-0072			10-89-1686	A-70203-0189	10-89-1687	A-70203-0228	10-89-2686	A-70203-0345	10-89-2687	A-70203-0384	68
70	10-88-1705	A-70203-0034	10-88-1706	A-70203-0073			10-89-1706	A-70203-0190	10-89-1707	A-70203-0229	10-89-2706	A-70203-0346	10-89-2707	A-70203-0385	70
72	10-88-1725	A-70203-0035	10-88-1726	A-70203-0074			10-89-1726	A-70203-0191	10-89-1727	A-70203-0230	10-89-2726	A-70203-0347	10-89-2727	A-70203-0386	72
74	10-88-1745	A-70203-0036	10-88-1746	A-70203-0075			10-89-1746	A-70203-0192	10-89-1747	A-70203-0231	10-89-2746	A-70203-0348	10-89-2747	A-70203-0387	74
76	10-88-1765	A-70203-0037	10-88-1766	A-70203-0076			10-89-1766	A-70203-0193	10-89-1767	A-70203-0232	10-89-2766	A-70203-0349	10-89-2767	A-70203-0388	76
78	10-88-1785	A-70203-0038	10-88-1786	A-70203-0077			10-89-1786	A-70203-0194	10-89-1787	A-70203-0233	10-89-2786	A-70203-0350	10-89-2787	A-70203-0389	78
80	10-88-1805	A-70203-0039	10-88-1806	A-70203-0078	10-88-1807	A-70203-0117	10-89-1806	A-70203-0195	10-89-1807	A-70203-0234	10-89-2806	A-70203-0351	10-89-2807	A-70203-0390	80

LTR.	REVISIONS	LTR.	REVISIONS
		D	SEE SHEET 1
		C1	SEE SHEET 1
		C	SEE SHEET 1
		B1	SEE SHEET 1
		B	SEE SHEET 1
		A	SEE SHEET 1

DIMENSIONS SHOWN (METRIC) INCH

UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°

	INCH	METRIC
3 PLACE	± .005	---
2 PLACE	± .01	± 0.13
1 PLACE	---	± 0.25

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DRWG. BY SMR | CHK'D. BY SMR | APP'D. BY | SCALE :

▽ = 0 ▼ = 0 REVISE ONLY ON CAD SYSTEM

TITLE: SALES ASSY-DUAL ROW WAFER W/BREAK-OFF OPTION RIGHT ANGLE/.025 SQ PINS

molex MOLEX INCORPORATED LISLE,ILL. 60532 U.S.A.

SHEET NO. 2 | DATE 11/18/93

PART NO. SEE CHART | DRWG. NO. SDA-70203-0001-5000

FILE NAME S70203X2

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DIV. DA | SIZE C