

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 4 to 80 circuits
- Easy breakaway to smaller sizes
- Contact and plating orientation according to DIN 41651
- North/south contact orientation avoids overstress
- High pin retention
- High mechanical stability after soldering

Reference Information

Product Specification: PS-99020-0001
 Packaging: Bag
 Mates With: C-Grid III Housing and Connectors
 Designed In: Inches

Electrical

Voltage: 350V
 Current: 3.0A
 Contact Resistance: 20mΩ max.
 Insulation Resistance: 5000 MΩ min.

Mechanical

Contact Retention to Housing: 20N (2.0kgf) min.
 Mating Force: 1N max. Gold and 3N max. Tin
 Unmating Force: 0.2N min. Gold and 0.2N min. Tin
 Normal Force: 1N

Physical

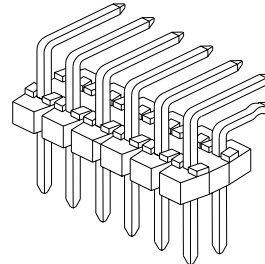
Housing: Black glass-filled polyester, UL 94V-0
 Contact: Copper Alloy, 0.64mm (.025") square pins
 Plating: See Table
 Operating Temperature: -55 to +125°C



2.54mm (.100") Pitch C-Grid III™ Kinked Pin Header

90630

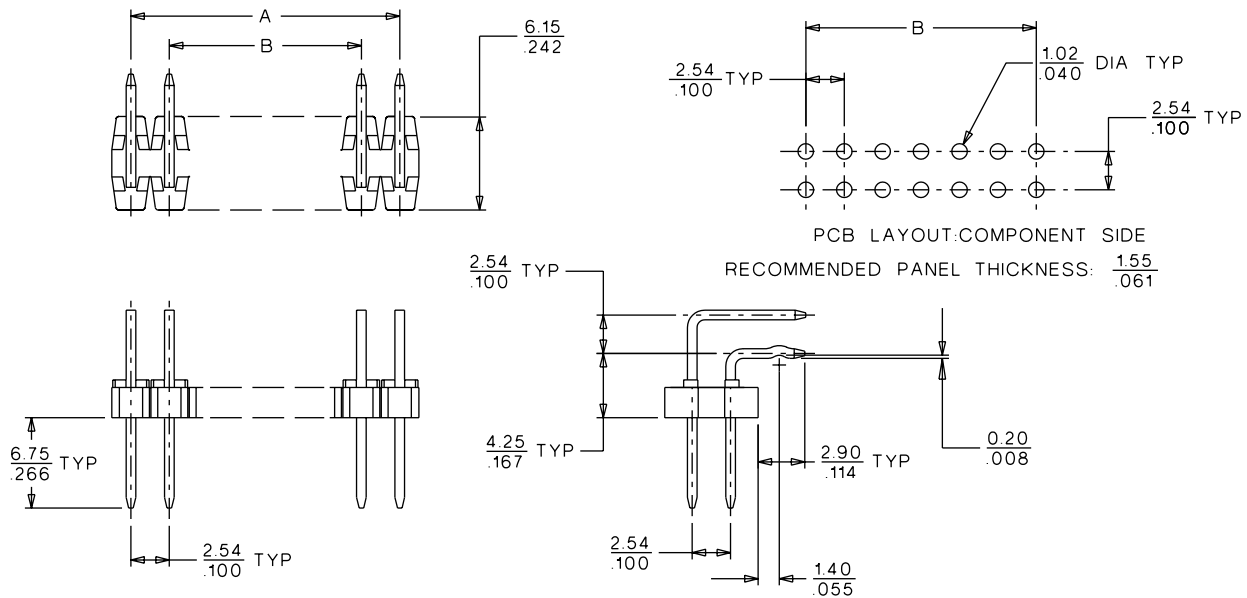
Dual Row Right Angle



2.54mm (.100") Pitch

CATALOG DRAWING (FOR REFERENCE ONLY)

Not For Use With Molex SL™ Components



ORDERING INFORMATION AND DIMENSIONS

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
4	90630-0122	90630-0762	90630-0922	5.08 (.200)	2.54 (.100)
6	90630-0123	90630-0763	90630-0923	7.62 (.300)	5.08 (.200)
8	90630-0124	90630-0764	90630-0924	10.16 (.400)	7.62 (.300)
10	90630-0125	90630-0765	90630-0925	12.70 (.500)	10.16 (.400)
12	90630-0126	90630-0766	90630-0926	15.24 (.600)	12.70 (.500)
14	90630-0127	90630-0767	90630-0927	17.78 (.700)	15.24 (.600)
16	90630-0128	90630-0768	90630-0928	20.32 (.800)	17.78 (.700)
18	90630-0129	90630-0769	90630-0929	22.86 (.900)	20.32 (.800)
20	90630-0130	90630-0770	90630-0930	25.40 (1.000)	22.86 (.900)
22	90630-0131	90630-0771	90630-0931	27.94 (1.100)	25.40 (1.000)
24	90630-0132	90630-0772	90630-0932	30.48 (1.200)	27.94 (1.100)
26	90630-0133	90630-0773	90630-0933	33.02 (1.300)	30.48 (1.200)
28	90630-0134	90630-0774	90630-0934	35.56 (1.400)	33.02 (1.300)
30	90630-0135	90630-0775	90630-0935	38.10 (1.500)	35.56 (1.400)
32	90630-0136	90630-0776	90630-0936	40.64 (1.600)	38.10 (1.500)
34	90630-0137	90630-0777	90630-0937	43.18 (1.700)	40.64 (1.600)
36	90630-0138	90630-0778	90630-0938	45.72 (1.800)	43.18 (1.700)

Circuits	Order No.			Dimension	
	Plating A	Plating E	Plating F	A	B
38	90630-0139	90630-0779	90630-0939	48.76 (1.900)	45.72 (1.800)
40	90630-0140	90630-0780	90630-0940	50.80 (2.000)	48.76 (1.900)
42	90630-0141	90630-0781	90630-0941	53.34 (2.100)	50.80 (2.000)
44	90630-0142	90630-0782	90630-0942	55.88 (2.200)	53.34 (2.100)
46	90630-0143	90630-0783	90630-0943	58.42 (2.300)	55.88 (2.200)
48	90630-0144	90630-0784	90630-0944	60.46 (2.400)	58.42 (2.300)
50	90630-0145	90630-0785	90630-0945	63.50 (2.500)	60.46 (2.400)
52	90630-0146	90630-0786	90630-0946	66.04 (2.600)	63.50 (2.500)
54	90630-0147	90630-0787	90630-0947	68.58 (2.700)	66.04 (2.600)
56	90630-0148	90630-0788	90630-0948	71.12 (2.800)	68.58 (2.700)
58	90630-0149	90630-0789	90630-0949	73.66 (2.900)	71.12 (2.800)
60	90630-0150	90630-0790	90630-0950	76.20 (3.000)	73.66 (2.900)
62	90630-0151	90630-0791	90630-0951	78.24 (3.100)	76.20 (3.000)
64	90630-0152	90630-0792	90630-0952	81.28 (3.200)	78.24 (3.100)
66	90630-0153	90630-0793	90630-0953	83.82 (3.300)	81.28 (3.200)
68	90630-0154	90630-0794	90630-0954	86.36 (3.400)	83.82 (3.300)
70	90630-0155	90630-0795	90630-0955	88.90 (3.500)	86.36 (3.400)
72	90630-0156	90630-0796	90630-0956	91.44 (3.600)	88.90 (3.500)
74	90630-0157	90630-0797	90630-0957	93.98 (3.700)	91.44 (3.600)
76	90630-0158	90630-0798	90630-0958	96.52 (3.800)	93.98 (3.700)
78	90630-0159	90630-0799	90630-0959	99.06 (3.900)	96.52 (3.800)
80	• 90630-0160	• 90630-0800	• 90630-0960	101.60 (4.000)	99.06 (3.900)

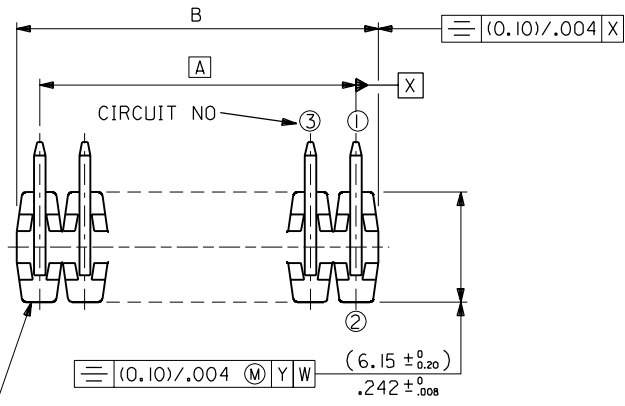
• Molex European standard product, usually available within shorter lead times
 For other available versions contact Molex

Plating A: 4µm (160µ") Tin/Lead over Nickel

Plating E: 0.38µm (15µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel

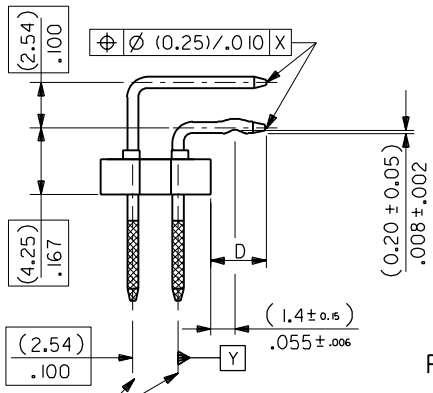
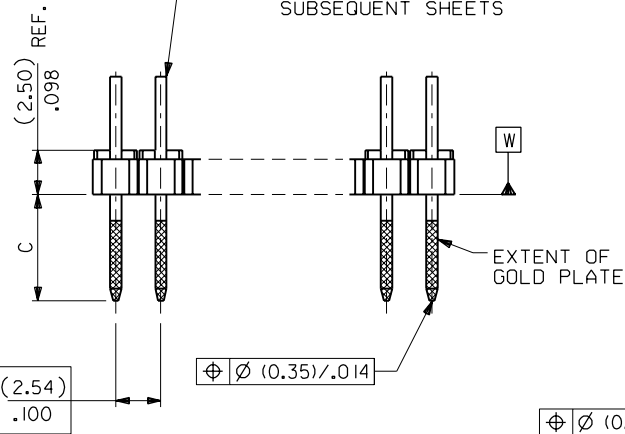
Plating F: 0.76µm (30µ") selective Gold over Nickel and 4µm (160µ") Tin/Lead over Nickel

PART NO. SEE CHART
 DWG. NO. SDA-90630



WAFER: 15% G.F. FILLED POLYESTER TO UL 94V-0.
 COLOUR : BLACK.

PINS: (Ø.635)/.025 SQ. BRASS WIRE.
 PLATED AS PER SUBSEQUENT SHEETS

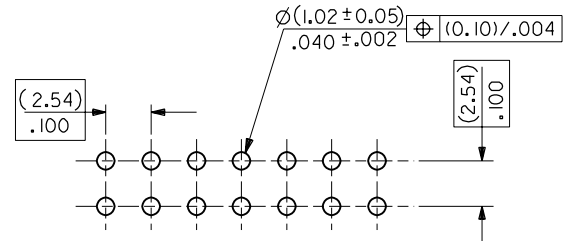


FOR PREVIOUS DRAWING ISSUES SEE MRI.

NEW RELEASE
 ECR E00166
 14 SEPTEMBER 1990 RD

DIMENSIONS SHOWN (METRIC) INCH	
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°	
INCH (METRIC)	
3 PLACE ± .	
2 PLACE ± .004	± .10
1 PLACE	± .25
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
DESIGN DIMENSION (PRIMARY)	<input checked="" type="checkbox"/> (MM) <input type="checkbox"/> IN.
EQUIVALENT DIMENSION (SECONDARY)	<input type="checkbox"/> (MM) <input checked="" type="checkbox"/> IN.

NOTES
 1. FOR ASSY NUMBERS WITH FINISH OPTIONS AND DIM'S C & D SEE SUBSEQUENT SHEETS.
 2. PCB THICKNESS: (1.37 - 1.80)/.054-.071.



RECOMMENDED P.C. BOARD HOLE PATTERN

2	B
1	B
SHL	REV.

REVISE ONLY ON CAD SYSTEM

CAD/CAM FILENAME: SA90630X1 DGN

TITLE: C-GRID III DUAL ROW KINKED RIGHT ANGLE HEADER

MOLEX EUROPE

SHEET NO. DATE: 10F2 90/09/14

PART NO. SEE CHART DWG. NO. SDA-90630 SIZE B

CKT SIZE	DIM. "A"	DIM. "B" (±0.20) ±.008	CKT SIZE	DIM. "A"	DIM. "B" (±0.20) ±.008
2X 1		(2.54) .100	2X21	(50.80) 2.000	(53.34) 2.100
2X 2	(2.54) .100	(5.08) .200	2X22	(53.34) 2.100	(55.88) 2.200
2X 3	(5.08) .200	(7.62) .300	2X23	(55.88) 2.200	(58.42) 2.300
2X 4	(7.62) .300	(10.16) .400	2X24	(58.42) 2.300	(60.96) 2.400
2X 5	(10.16) .400	(12.70) .500	2X25	(60.96) 2.400	(63.50) 2.500
2X 6	(12.70) .500	(15.24) .600	2X26	(63.50) 2.500	(66.04) 2.600
2X 7	(15.24) .600	(17.78) .700	2X27	(66.04) 2.600	(68.58) 2.700
2X 8	(17.78) .700	(20.32) .800	2X28	(68.58) 2.700	(71.12) 2.800
2X 9	(20.32) .800	(22.86) .900	2X29	(71.12) 2.800	(73.66) 2.900
2X10	(22.86) .900	(25.40) 1.000	2X30	(73.66) 2.900	(76.20) 3.000
2X11	(25.40) 1.000	(27.94) 1.100	2X31	(76.20) 3.000	(78.74) 3.100
2X12	(27.94) 1.100	(30.48) 1.200	2X32	(78.74) 3.100	(81.28) 3.200
2X13	(30.48) 1.200	(33.02) 1.300	2X33	(81.28) 3.200	(83.82) 3.300
2X14	(33.02) 1.300	(35.56) 1.400	2X34	(83.82) 3.300	(86.36) 3.400
2X15	(35.56) 1.400	(38.10) 1.500	2X35	(86.36) 3.400	(88.90) 3.500
2X16	(38.10) 1.500	(40.64) 1.600	2X36	(88.90) 3.500	(91.44) 3.600
2X17	(40.64) 1.600	(43.18) 1.700	2X37	(91.44) 3.600	(93.98) 3.700
2X18	(43.18) 1.700	(45.72) 1.800	2X38	(93.98) 3.700	(96.52) 3.800
2X19	(45.72) 1.800	(48.26) 1.900	2X39	(96.52) 3.800	(99.06) 3.900
2X20	(48.26) 1.900	(50.80) 2.000	2X40	(99.06) 3.900	(101.60) 4.000

	10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																	
F	PART NO. SEE CHART DWG. NO. SDA-90630 DIM C (± 0.25) ± .010 (6.75) .266 DIM D (± 0.30) ± .02 (2.90) .114	<table border="1"> <thead> <tr> <th>CIRCUIT SIZE</th> <th>PLATING TYPE A PART NO.</th> <th>PLATING TYPE E PART NO.</th> <th>PLATING TYPE F PART NO.</th> <th>KINKED PIN POSITIONS</th> </tr> </thead> <tbody> <tr><td>2 X 1</td><td>90630-0121</td><td>90630-0761</td><td>90630-0921</td><td>1</td></tr> <tr><td>2 X 2</td><td>↑ -0122</td><td>↑ -0762</td><td>↑ -0922</td><td>1,3</td></tr> <tr><td>2 X 3</td><td>-0123</td><td>-0763</td><td>-0923</td><td>1 & 5</td></tr> <tr><td>2 X 4</td><td>-0124</td><td>-0764</td><td>-0924</td><td>3 & 5</td></tr> <tr><td>2 X 5</td><td>-0125</td><td>-0765</td><td>-0925</td><td>3 & 7</td></tr> <tr><td>2 X 6</td><td>-0126</td><td>-0766</td><td>-0926</td><td>5 & 7</td></tr> <tr><td>2 X 7</td><td>-0127</td><td>-0767</td><td>-0927</td><td>5 & 9</td></tr> <tr><td>2 X 8</td><td>-0128</td><td>-0768</td><td>-0928</td><td>7 & 9</td></tr> <tr><td>2 X 9</td><td>-0129</td><td>-0769</td><td>-0929</td><td>7 & 11</td></tr> <tr><td>2 X 10</td><td>-0130</td><td>-0770</td><td>-0930</td><td>9 & 11</td></tr> <tr><td>2 X 11</td><td>-0131</td><td>-0771</td><td>-0931</td><td>1, 11 & 21</td></tr> <tr><td>2 X 12</td><td>-0132</td><td>-0772</td><td>-0932</td><td>1, 12 & 23</td></tr> <tr><td>2 X 13</td><td>-0133</td><td>-0773</td><td>-0933</td><td>1, 13 & 25</td></tr> <tr><td>2 X 14</td><td>-0134</td><td>-0774</td><td>-0934</td><td>1, 15 & 27</td></tr> <tr><td>2 X 15</td><td>-0135</td><td>-0775</td><td>-0935</td><td>1, 15 & 29</td></tr> <tr><td>2 X 16</td><td>-0136</td><td>-0776</td><td>-0936</td><td>1, 15 & 31</td></tr> <tr><td>2 X 17</td><td>-0137</td><td>-0777</td><td>-0937</td><td>1, 17 & 33</td></tr> <tr><td>2 X 18</td><td>-0138</td><td>-0778</td><td>-0938</td><td>1, 17 & 35</td></tr> <tr><td>2 X 19</td><td>-0139</td><td>-0779</td><td>-0939</td><td>1, 19 & 37</td></tr> <tr><td>2 X 20</td><td>-0140</td><td>-0780</td><td>-0940</td><td>1, 19 & 39</td></tr> <tr><td>2 X 21</td><td>-0141</td><td>-0781</td><td>-0941</td><td>1, 21 & 41</td></tr> <tr><td>2 X 22</td><td>-0142</td><td>-0782</td><td>-0942</td><td>1, 21 & 43</td></tr> <tr><td>2 X 23</td><td>-0143</td><td>-0783</td><td>-0943</td><td>1, 23 & 45</td></tr> <tr><td>2 X 24</td><td>-0144</td><td>-0784</td><td>-0944</td><td>1, 23 & 47</td></tr> <tr><td>2 X 25</td><td>-0145</td><td>-0785</td><td>-0945</td><td>1, 25 & 49</td></tr> <tr><td>2 X 26</td><td>-0146</td><td>-0786</td><td>-0946</td><td>1, 25 & 51</td></tr> <tr><td>2 X 27</td><td>-0147</td><td>-0787</td><td>-0947</td><td>1, 27 & 53</td></tr> <tr><td>2 X 28</td><td>-0148</td><td>-0788</td><td>-0948</td><td>1, 27 & 55</td></tr> <tr><td>2 X 29</td><td>-0149</td><td>-0789</td><td>-0949</td><td>1, 29 & 57</td></tr> <tr><td>2 X 30</td><td>-0150</td><td>-0790</td><td>-0950</td><td>1, 29 & 59</td></tr> <tr><td>2 X 31</td><td>-0151</td><td>-0791</td><td>-0951</td><td>1, 31 & 61</td></tr> <tr><td>2 X 32</td><td>-0152</td><td>-0792</td><td>-0952</td><td>1, 31 & 63</td></tr> <tr><td>2 X 33</td><td>-0153</td><td>-0793</td><td>-0953</td><td>1, 33 & 65</td></tr> <tr><td>2 X 34</td><td>-0154</td><td>-0794</td><td>-0954</td><td>1, 33 & 67</td></tr> <tr><td>2 X 35</td><td>-0155</td><td>-0795</td><td>-0955</td><td>1, 35 & 69</td></tr> <tr><td>2 X 36</td><td>-0156</td><td>-0796</td><td>-0956</td><td>1, 35 & 71</td></tr> <tr><td>2 X 37</td><td>-0157</td><td>-0797</td><td>-0957</td><td>1, 37 & 73</td></tr> <tr><td>2 X 38</td><td>-0158</td><td>-0798</td><td>-0958</td><td>1, 37 & 75</td></tr> <tr><td>2 X 39</td><td>↓ -0159</td><td>↓ -0799</td><td>↓ -0959</td><td>1, 39 & 77</td></tr> <tr><td>2 X 40</td><td>90630-0160</td><td>90630-0800</td><td>90630-0960</td><td>1, 39 & 79</td></tr> </tbody> </table>				CIRCUIT SIZE	PLATING TYPE A PART NO.	PLATING TYPE E PART NO.	PLATING TYPE F PART NO.	KINKED PIN POSITIONS	2 X 1	90630-0121	90630-0761	90630-0921	1	2 X 2	↑ -0122	↑ -0762	↑ -0922	1,3	2 X 3	-0123	-0763	-0923	1 & 5	2 X 4	-0124	-0764	-0924	3 & 5	2 X 5	-0125	-0765	-0925	3 & 7	2 X 6	-0126	-0766	-0926	5 & 7	2 X 7	-0127	-0767	-0927	5 & 9	2 X 8	-0128	-0768	-0928	7 & 9	2 X 9	-0129	-0769	-0929	7 & 11	2 X 10	-0130	-0770	-0930	9 & 11	2 X 11	-0131	-0771	-0931	1, 11 & 21	2 X 12	-0132	-0772	-0932	1, 12 & 23	2 X 13	-0133	-0773	-0933	1, 13 & 25	2 X 14	-0134	-0774	-0934	1, 15 & 27	2 X 15	-0135	-0775	-0935	1, 15 & 29	2 X 16	-0136	-0776	-0936	1, 15 & 31	2 X 17	-0137	-0777	-0937	1, 17 & 33	2 X 18	-0138	-0778	-0938	1, 17 & 35	2 X 19	-0139	-0779	-0939	1, 19 & 37	2 X 20	-0140	-0780	-0940	1, 19 & 39	2 X 21	-0141	-0781	-0941	1, 21 & 41	2 X 22	-0142	-0782	-0942	1, 21 & 43	2 X 23	-0143	-0783	-0943	1, 23 & 45	2 X 24	-0144	-0784	-0944	1, 23 & 47	2 X 25	-0145	-0785	-0945	1, 25 & 49	2 X 26	-0146	-0786	-0946	1, 25 & 51	2 X 27	-0147	-0787	-0947	1, 27 & 53	2 X 28	-0148	-0788	-0948	1, 27 & 55	2 X 29	-0149	-0789	-0949	1, 29 & 57	2 X 30	-0150	-0790	-0950	1, 29 & 59	2 X 31	-0151	-0791	-0951	1, 31 & 61	2 X 32	-0152	-0792	-0952	1, 31 & 63	2 X 33	-0153	-0793	-0953	1, 33 & 65	2 X 34	-0154	-0794	-0954	1, 33 & 67	2 X 35	-0155	-0795	-0955	1, 35 & 69	2 X 36	-0156	-0796	-0956	1, 35 & 71	2 X 37	-0157	-0797	-0957	1, 37 & 73	2 X 38	-0158	-0798	-0958	1, 37 & 75	2 X 39	↓ -0159	↓ -0799	↓ -0959	1, 39 & 77	2 X 40	90630-0160	90630-0800	90630-0960	1, 39 & 79									
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2 X 1		90630-0121	90630-0761	90630-0921	1																																																																																																																																																																																																																						
2 X 2		↑ -0122	↑ -0762	↑ -0922	1,3																																																																																																																																																																																																																						
2 X 3		-0123	-0763	-0923	1 & 5																																																																																																																																																																																																																						
2 X 4		-0124	-0764	-0924	3 & 5																																																																																																																																																																																																																						
2 X 5		-0125	-0765	-0925	3 & 7																																																																																																																																																																																																																						
2 X 6		-0126	-0766	-0926	5 & 7																																																																																																																																																																																																																						
2 X 7		-0127	-0767	-0927	5 & 9																																																																																																																																																																																																																						
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2 X 18		-0138	-0778	-0938	1, 17 & 35																																																																																																																																																																																																																						
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2 X 21		-0141	-0781	-0941	1, 21 & 41																																																																																																																																																																																																																						
2 X 22		-0142	-0782	-0942	1, 21 & 43																																																																																																																																																																																																																						
2 X 23		-0143	-0783	-0943	1, 23 & 45																																																																																																																																																																																																																						
2 X 24		-0144	-0784	-0944	1, 23 & 47																																																																																																																																																																																																																						
2 X 25		-0145	-0785	-0945	1, 25 & 49																																																																																																																																																																																																																						
2 X 26		-0146	-0786	-0946	1, 25 & 51																																																																																																																																																																																																																						
2 X 27		-0147	-0787	-0947	1, 27 & 53																																																																																																																																																																																																																						
2 X 28		-0148	-0788	-0948	1, 27 & 55																																																																																																																																																																																																																						
2 X 29		-0149	-0789	-0949	1, 29 & 57																																																																																																																																																																																																																						
2 X 30		-0150	-0790	-0950	1, 29 & 59																																																																																																																																																																																																																						
2 X 31		-0151	-0791	-0951	1, 31 & 61																																																																																																																																																																																																																						
2 X 32		-0152	-0792	-0952	1, 31 & 63																																																																																																																																																																																																																						
2 X 33		-0153	-0793	-0953	1, 33 & 65																																																																																																																																																																																																																						
2 X 34		-0154	-0794	-0954	1, 33 & 67																																																																																																																																																																																																																						
2 X 35		-0155	-0795	-0955	1, 35 & 69																																																																																																																																																																																																																						
2 X 36		-0156	-0796	-0956	1, 35 & 71																																																																																																																																																																																																																						
2 X 37		-0157	-0797	-0957	1, 37 & 73																																																																																																																																																																																																																						
2 X 38		-0158	-0798	-0958	1, 37 & 75																																																																																																																																																																																																																						
2 X 39	↓ -0159	↓ -0799	↓ -0959	1, 39 & 77																																																																																																																																																																																																																							
2 X 40	90630-0160	90630-0800	90630-0960	1, 39 & 79																																																																																																																																																																																																																							
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A	NOTES: 1. FOR PLATING VARIATIONS SEE ENG.STD. SDES-99000-0003.																																																																																																																																																																																																																										
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FOR PREVIOUS DRAWING ISSUES SEE MRI.

SEE SHEET 1.

REVISIONS	DIMENSIONS SHOWN (METRIC) INCH	
	UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°	
	INCH	(METRIC)
	3 PLACE ± .	±
	2 PLACE ± .	±
	1 PLACE ±	±
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
	DESIGN DIMENSION (PRIMARY)	<input checked="" type="checkbox"/> (MM) <input type="checkbox"/> IN.
	EQUIVALENT DIMENSION (SECONDARY)	<input type="checkbox"/> (MM) <input checked="" type="checkbox"/> IN.

DRWG BY	RD
CHK'D BY	
APP'D BY	
SCALE	

REVISE ONLY ON CAD SYSTEM		SH.	REV.
CAD/CAM FILENAME SA90630X2 DCN	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
TITLE C-GRID III DUAL ROW KINKED RIGHT ANGLE HEADER			
MOLLEX EUROPE		SHEET NO. 20F	DATE 90/09/14
PART NO. SEE CHART	DWG NO. SDA-90630	SIZE B	