

## Excellent Integrated System Limited

Stocking Distributor

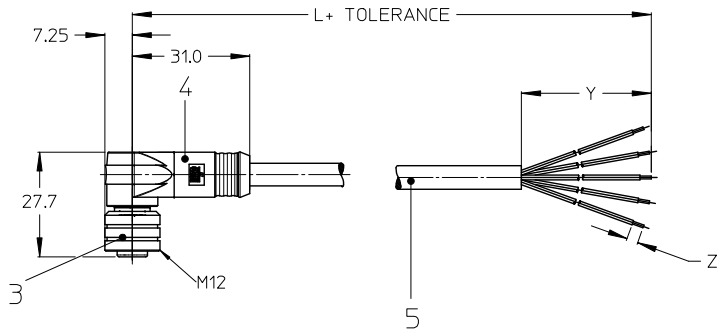
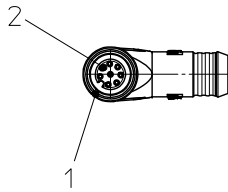
Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Molex Connector Corporation](#)  
[1200651641](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

**RIGHTANGLE PLUG M12 FEMALE**



**NOTES:**

TEMPERATURE RANGE SEE TABLE ON PAGE 2  
 CONTACT CURRENT RATING 3-5 POLES 4A  
 8 POLES 2A  
 VOLTAGE RATING 3-4 POLES 250V  
 5 POLES 60V  
 8 POLES 30V  
 PROTECTION CLASS IP 67

**TOLERANCES**

≤ 1m ± 20/-10mm  
 1m - 5m ± 25mm  
 5m - 10m ± 30mm  
 > 10m ± 30mm  
 > 20m ± 50mm

	3 POL	4 POL	5 POL	8 POL	REMARKS
Y	30 +/-2	50 +/-2	50 +/-2	80 +/-3	OPEN END FOR TESTING
Z	3-6	3-6	3-6	3-6	NOT DEFINED

3 WIRE		4 WIRE		5 WIRE		8 WIRE	
PIN #	WIRE	PIN #	WIRE	PIN #	WIRE	PIN #	WIRE
1	BROWN	1	BROWN	1	BROWN	1	WHITE
2	-	2	WHITE	2	WHITE	2	BROWN
3	BLUE	3	BLUE	3	BLUE	3	GREEN
4	BLACK	4	BLACK	4	BLACK	4	YELLOW
5	-	5	-	5	GREY	5	GREY
						6	PINK
						7	BLUE
						8	RED
REQUIRED TO IEC 60947-5-2				REQUIRED TO DIN 47100			

5	CABLE	SEE TABLE (PAGE 2)	---
4	OVERMOULDING	TPU	SEE CODE (PAGE 2)
3	MALE COUPLING NUT	BRASS	SEE CODE (PAGE 2)
2	PIN CONTACT	BRASS	GOLD PLATED
1	INSERT	PUR	BLACK
ITEM	PART	MATERIAL	FINISH

ENTER DESCRIPTION EC NO: IPG2014-0972 DRAWNSCHAUSHAUSER 2013/11/26 CHKD:PMERUNKA 2014/06/10 APPR:RSILLER 2014/06/10	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.10 ± --- 0 PLACE ± --- ± --- ANGULAR ± .5 °	DIMENSION STYLE MM ONLY DRAWN BY: PMERUNKA DATE: 2012/04/24 CHECKED BY: RSILLER DATE: 2013/01/18 APPROVED BY: CBURGER DATE: 2013/07/16	SCALE: 1:1 DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: CSE M12 XP AC FE RA XM SE UNSH <b>molex</b> DOCUMENT NO. SD-120065-052 SHEET NO. 1 OF 4
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
	REV 3		SIZE A3		

10 9 8 7 6 5 4 3 2 1

**NUMERICAL CODE** (Available parts see table page 3 ff others on request.)



80 = M12x1  
single ended

poles:  
3 = 3 poles  
4 = 4 poles  
5 = 5 poles

header:  
000 = plug female straight  
001 = plug female 90° right  
006 = plug male straight  
007 = plug male 90° right

Cable:  
E02 = 0,25mm<sup>2</sup>, PVC black  
E03 = 0,34mm<sup>2</sup>, PVC black  
H08 = 0,25mm<sup>2</sup>, PUR black LS0H  
H09 = 0,34mm<sup>2</sup>, PUR black LS0H  
I03 = 0,34mm<sup>2</sup>, PVC grey  
K05 = 0,34mm<sup>2</sup>, TPE yellow  
P02 = 0,25mm<sup>2</sup>, PUR/PVC black  
P03 = 0,34mm<sup>2</sup>, PUR/PVC black  
P82 = 0,34mm<sup>2</sup>, PUR black irradiated  
I02 = 0,34mm<sup>2</sup>, PCV grey  
I20 = 0,34mm<sup>2</sup>, PCV grey  
I26 = 0,34mm<sup>2</sup>, PCV grey  
P12 = 0,50mm<sup>2</sup>, PVC black

M = meter  
C = centimeter

length:  
Example  
020 = 2 m

CABLE TYPE	WIRE GAUGE	CABLE JACKET	UL	CSA	static	flexing	drag chain tested	other
E02	0,25mm <sup>2</sup>	PVC black	STYLE 2464	1/11 A/B 80°/300V	-30°C to +80°C 5xD	-5°C to +80°C 9xD	---	---
E03	0,34mm <sup>2</sup>	PVC black	STYLE 2464	1/11 A/B 80°/300V	-30°C to +80°C 5xD	-5°C to +80°C 9xD	---	---
H08	0,25mm <sup>2</sup>	PUR black LS0H	AWM STYLE 21198/10493	APPROVED	-50°C to +80°C 5xD	-25°C to +80°C 10xD	2000000 cycles	---
H09	0,34mm <sup>2</sup>	PUR black LS0H	AWM STYLE 21198/10493	APPROVED	-50°C to +80°C 5xD	-25°C to +80°C 10xD	drag chain 60°C	---
I03	0,34mm <sup>2</sup>	PVC grey	---	---	-30°C to +70°C	-5°C to +70°C	---	---
K05	0,34mm <sup>2</sup>	TPE yellow	ITC E195601 or PLTC	AWM 1/11 A/B FT4 LL54185	---	---	---	CSA-US: ITC LL54185-02
P02	0,25mm <sup>2</sup>	PUR/PVC black	not applicable	not applicable	-30°C to +80°C 7xD	-5°C to +80°C 15xD	---	---
P03	0,34mm <sup>2</sup>	PUR/PVC black	not applicable	not applicable	-30°C to +80°C 7xD	-5°C to +80°C 15xD	---	---
P82	0,34mm <sup>2</sup>	irrad. PUR orange	---	---	-50°C to +105°C 5xD	-40°C to +105°C 7.5xD	---	---
I02	0,34mm <sup>2</sup>	PVC grey	---	---	-25°C to +70°C 5xD	-5°C to +70°C 10xD	---	---
I20	0,34mm <sup>2</sup>	PVC grey	---	---	-30°C to +70°C	-5°C to +70°C	---	---
I26	0,50mm <sup>2</sup>	PVC grey	not applicable	not applicable	-30°C to +70°C	-5°C to +70°C	---	---
P12	0,34mm <sup>2</sup>	PVC black	---	---	-30°C to +90°C	-5°C to +90°C	---	---

<b>ENTER DESCRIPTION</b> EC No: IPG2014-0972 DRAWN BY: SCHAEFER/2013/11/26 CHECKED BY: MERUNKA 2014/06/10 APPROVED BY: RILLER 2014/06/10 REV: 3	<b>QUALITY SYMBOLS</b> ▽=0 ▽=0	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.10 ± --- 0 PLACE ± --- ± ---	mm INCH ± --- ± --- ± 0.05 ± --- ± 0.10 ± --- ± --- ± ---	DRAWN BY P. MERUNKA DATE 2012/04/24	CHECKED BY R. RILLER DATE 2013/01/18	TITLE CSE M12 XP AC FE RA XM SE UNSH				
		ANGULAR ± .5 °		APPROVED BY C. BURGER DATE 2013/07/16	MATERIAL NO. SEE TABLE				DOCUMENT NO. SD-120065-052	SHEET NO. 2 OF 4
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

9 8 7 6 5 4 3 2 1

	10	9	8	7	6	5	4	3	2	1																									
	PART NUMBER	NUMERICAL CODE	CABLE LENGTH *L* IN M		PART NUMBER	NUMERICAL CODE	CABLE LENGTH *L* IN M		PART NUMBER	NUMERICAL CODE	CABLE LENGTH *L* IN M																								
F	1200062292	803001E03M003	0.3M		1200065013	803001P03M030G	3M		1200651622	804001K03M010	1M																								
	1200658046	803001E03M006	0.6M		1200658611	803001P03M040	4M		1200651623	804001K03M020	2M																								
	1200658047	803001E03M0061	0.61M		1200060012	803001P03M050	5M		1200650907	804001K03M0208	2.08M																								
	1200062402	803001E03M008	0.8M		1200658976	803001P03M0505	5.05M		1200651625	804001K03M030	3M																								
	1200060175	803001E03M010	1M		1200651773	803001P03M050G	5M		1200651626	804001K03M040	4M																								
	1200061542	803001E03M011	1.1M		1200060013	803001P03M100	10M		1200651863	804001K03M0402	4.02M																								
	1200060007	803001E03M020	2M		1200060216	803001P03M150	10.5M		1200650908	804001K03M0408	4.08M																								
	1200061541	803001E03M022	2.2M		1200658311	803001P03M200	20M		1200651628	804001K03M050	5M																								
	1200060178	803001E03M030	3M		1200658312	803001P03M300	30M		1200651630	804001K03M0502	5.02M																								
	1200061540	803001E03M033	3.3M		1200063682	803001P82M020	2M		1200650909	804001K03M0508	5.08M																								
	1200658564	803001E03M040	4M		1200658668	804001H09M010	1M		1200651631	804001K03M060	6M																								
E	1200658048	803001E03M0401	4.01M		1200658669	804001H09M015	1.5M		1200651632	804001K03M0602	6.02M																								
	1200060008	803001E03M050	5M		1200658513	804001H09M020	2M		1200651633	804001K03M080	8M																								
	1200658234	803001E03M0501	5.01M		1200658670	804001H09M030	3M		1200651634	804001K03M100	10M																								
	1200658268	803001E03M0505	5.05M		1200658671	804001H09M040	4M		1200651635	804001K03M150	10.5M																								
	1200658886	803001E03M050H	5M		1200658193	804001H09M050	5M		1200652059	804001K03M200	20M																								
	1200061538	803001E03M051	5.1M		1200064433	804001H09M050G	5M		1200651638	804001K05M010	1M																								
	1200061553	803001E03M058	5.8M		1200658010	804001H09M050H	5M		1200651639	804001K05M020	2M																								
	1200061552	803001E03M066	6.6M		1200658194	804001H09M100	10M		1200651640	804001K05M030	3M																								
	1200060009	803001E03M100	10M		1200064436	804001H09M100G	10M		1200651641	804001K05M040	4M																								
D	1200658269	803001E03M1005	10.05M		1200658011	804001H09M100H	10M		1200651642	804001K05M050	5M																								
	1200658885	803001E03M100H	10M		1200658195	804001H09M150	10.5M		1200651643	804001K05M060	6M																								
	1200060184	803001E03M150	10.5M		1200658185	804001H09M150G	10.5M		1200651644	804001K05M100	10M																								
	1200060187	803001E03M200	20M		1200658196	804001H09M200	20M		1200652139	804001K05M150	10.5M																								
	1200658713	803001H09M010	1M		1200061935	804001103M010	1M		1200651995	804001K05M250	20.5M																								
	1200658714	803001H09M015	1.5M		1200658707	804001103M010G	1M		1200063405	804001P03M003	0.3M																								
	1200658715	803001H09M020	2M		1200060503	804001103M020	2M		1200010071	804001P03M003W	0.3M																								
	1200658716	803001H09M030	3M		1200658708	804001103M020G	2M		1200010072	804001P03M006W	0.6M																								
	1200658717	803001H09M040	4M		1200060505	804001103M030	3M		1200061986	804001P03M010	1M																								
	1200658718	803001H09M050	5M		1200658709	804001103M030G	3M		1200658624	804001P03M010G	1M																								
C	1200658719	803001H09M100	10M		1200064244	804001103M040	4M		1200010073	804001P03M010W	1M																								
	1200060202	803001103M020	2M		1200658710	804001103M040G	4M		1200010074	804001P03M015W	1.5M																								
	1200062851	803001103M025	2.5M		1200060042	804001103M050	5M		1200060024	804001P03M020	2M																								
	1200060204	803001103M030	3M		1200062575	804001103M0501	5.01M		1200651783	804001P03M020G	2M																								
	1200658052	803001103M036	3.6M		1200063532	804001103M0505	5.05M		1200010075	804001P03M020W	2M																								
	1200658594	803001103M040	4M		1200658711	804001103M050G	5M		1200060510	804001P03M030	3M																								
	1200060010	803001103M050	5M		1200060507	804001103M100	10M		1200658625	804001P03M030G	3M																								
	1200064210	803001103M051	5.1M		1200658712	804001103M100G	10M		1200010076	804001P03M030W	3M																								
	1200060205	803001103M100	10M		1200060508	804001103M150	10.5M		1200652147	804001P03M040	4M																								
B	1200658287	803001120M100	10M		1200062112	804001120M003	0.3M		1200658631	804001P03M040G	4M																								
	1200651489	803001K05M020	2M		1200658276	804001120M100	10M		1200060025	804001P03M050	5M																								
	1200651490	803001K05M040	4M		1200062161	804001P82M1007	10.07M		1200651785	804001P03M050G	5M																								
	1200651491	803001K05M050	5M		1200062148	804001120M160	10.6M		1200658992	804001P03M050H	5M																								
	1200651492	803001K05M060	6M																																
	1200651493	803001K05M100	10M																																
A	1200651494	803001K05M120	10.2M		<b>ENTER DESCRIPTION</b> EC No. IPG2014-0972 DRAWS: SCHAEFER 2013/11/26 CHKD: PIERUNKA 2014/06/10 APPR: RSILLER 2014/06/10		<b>QUALITY SYMBOLS</b> ▽=0 ▽=0		<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b> <table border="1"> <tr> <td></td> <td>mm</td> <td>INCH</td> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.05</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.10</td> <td>± ---</td> </tr> <tr> <td>0 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>			mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.05	± ---	1 PLACE	± 0.10	± ---	0 PLACE	± ---	± ---	<b>DIMENSION STYLE</b> MM ONLY		<b>SCALE</b> 1:1	<b>DESIGN UNITS</b> METRIC	<b>THIRD ANGLE PROJECTION</b>	<b>CSE M12 XP AC FE RA XM SE UNSH</b>	
	mm	INCH																																	
4 PLACES	± ---	± ---																																	
3 PLACES	± ---	± ---																																	
2 PLACES	± 0.05	± ---																																	
1 PLACE	± 0.10	± ---																																	
0 PLACE	± ---	± ---																																	
	120062837	803001P03M006	0.6M		<b>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</b>		<b>DRAWN BY</b> PMERUNKA <b>DATE</b> 2012/04/24 <b>CHECKED BY</b> DATE <b>APPROVED BY</b> DATE CBURGER 2013/07/16		<b>DOCUMENT NO.</b> SD-120065-052		<b>SHEET NO.</b> 3 OF 4																								
	1200061318	803001P03M010	1M		<b>SEE TABLE</b> THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																														
	1200060011	803001P03M020	2M																																
	1200010769	803001P03M020X	2M																																
	1200062027	803001P03M022	2.2M																																
	1200063340	803001P03M025	2.5M																																
	1200060212	803001P03M030	3M																																



Distributor of Molex Connector Corporation: Excellent Integrated System Limited

Datasheet of 1200651641 - CORD 4 POS FEMALE, RA 4M 22 AWG

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

10	9	8	7	6	5	4	3	2	1		
PART NUMBER	NUMERICAL CODE	CABLE LENGTH *L* IN M	PART NUMBER	NUMERICAL CODE	CABLE LENGTH *L* IN M	PART NUMBER	NUMERICAL CODE	CABLE LENGTH *L* IN M	PART NUMBER	NUMERICAL CODE	CABLE LENGTH *L* IN M
1200010077	804001P03M050W	5M	1200658617	805001P03M010	1M	1200658620	808001P02M030	3M			
1200658206	804001P03M060	6M	1200660663	805001P03M020	2M	1200650961	808001P02M040	4M			
1200010078	804001P03M070W	7M	1200658627	805001P03M030	3M	1200650962	808001P02M050	5M			
1200651787	804001P03M100	10M	1200658184	805001P03M040	4M	1200650963	808001P02M100	10M			
1200064391	804001P03M1001	10.01M	1200651793	805001P03M050	5M	1200658483	808001P02M150	10.5M			
1200062313	804001P03M100H	10M	1200658988	805001P03M050H	5M	1200658106	808001P19M030	3M			
1200010079	804001P03M100W	10M	1200652156	805001P03M060	6M	1200655008	808001P19M050	5M			
1200064350	804001P03M120	10.2M	1200660664	805001P03M100	10M	1200658328	808001P19M100	10M			
1200063793	804001P03M140	10.4M	1200658989	805001P03M100H	10M	1200658544	808001P19M250	20.5M			
1200060516	804001P03M150	10.5M	1200061760	805001P03M150	10.5M	1200659121	803001103M100Y	10M			
1200010080	804001P03M150W	10.5M	1200658314	805001P03M200	20M	1200659056	803001E03M050Y	5M			
1200060517	804001P03M200	20M	1200062872	805001P12M0075	0.75M	1200659057	803001E03M100Y	10M			
1200064289	804001P03M400	40M	1200658089	805001P12M020	2M	1200659074	803001E03M150Y	10.5M			
1200658324	804001P20M030	3M	1200658933	805001P12M050	5M	1200659124	804001P02M100HY	10M			
1200062922	804001P20M050	5M	1200658934	805001P12M100	10M	1200659061	804001E03M020Y	2M			
1200062919	804001P20M100	10M	1200655071	805001P82M020	2M	1200659062	804001E03M050Y	5M			
1200064184	804001P20M250	20.5M	1200063386	805001P82M050	5M	1200659063	804001E03M100Y	10M			
1200071330	804001P82M0207	2.07M	1200062764	805001P82M100	10M	1200659068	804001103M050Y	5M			
1200062155	804001P82M030	3M	1200658585	808001E02M010	1M	1200659069	804001P82M0507Y	5.07M			
1200062520	804001P82M050	5M	1200658586	808001E02M020	2M	1200659077	804001E03M150Y	10.5M			
1200060043	804001P82M0507	5.07M	1200658587	808001E02M030	3M	1200659078	804001103M100Y	10M			
1200062615	804001P82M100	10M	1200658588	808001E02M040	4M	1200659086	804001P82M1007Y	10.07M			
1200658006	804001P82M1507	10.507M	1200658261	808001E02M050	5M	1200668648	804001P82M0207Y	2.07M			
1200658007	804001P82M2007	20.07M	1200658310	808001E02M0501	5.01M	1200659091	804001S20M100Y	10M			
1200658573	805001E03M010	1M	1200658589	808001E02M100	10M	1200659093	804001A09M050Y	5M			
1200060652	805001E03M020	2M	1200658931	808001E02M150	10.5M	1200659094	804001A09M100Y	10M			
1200658574	805001E03M030	3M	1200658932	808001E02M250	20.5M	1200659095	804001H09M050HY	5M			
1200658575	805001E03M040	4M	1200651797	808001E52M020	2M	1200659098	804001S20M200Y	20M			
1200060654	805001E03M050	5M	1200658647	808001H08M010	1M	1200659099	804001H09M050Y	5M			
1200060655	805001E03M0501	5.01M	1200658648	808001H08M015	1.5M	1200659108	804001P03M050HY	5M			
1200060657	805001E03M100	10M	1200658649	808001H08M020	2M						
1200658359	805001E03M150	15M	1200658650	808001H08M030	3M						
1200658664	805001H09M010	1M	1200658651	808001H08M040	4M						
1200658665	805001H09M015	1.5M	1200658245	808001H08M050	5M						
1200658296	805001H09M020	2M	1200658652	808001H08M100	10M						
1200658666	805001H09M030	3M	1200658683	808001102M010	1M						
1200658667	805001H09M040	4M	1200658684	808001102M020	2M						
1200658297	805001H09M050	5M	1200658685	808001102M030	3M						
1200658298	805001H09M100	10M	1200658686	808001102M040	4M						
1200658471	805001103M010	1M	1200658687	808001102M050	5M						
1200658326	805001103M015	1.5M	1200658688	808001102M100	10M						
1200658607	805001103M030	3M	1200658619	808001P02M010	1M						
1200658608	805001103M040	4M	1200650960	808001P02M020	2M						
1200061563	805001103M050	5M									
1200063825	805001103M050G	5M									
1200062334	805001103M100	10M									
1200061850	8050011126M050	5M									
1200063564	8050011126M100	10M									
1200658548	8050011126M250	20.5M									
1200651720	805001K03M020	2M									
1200651721	805001K03M040	4M									
1200651722	805001K03M050	5M									
1200651723	805001K03M060	6M									
1200652155	805001K03M100	10M									

ib\_frame\_A3\_P\_AM\_T  
Rev E1 2012/01/25

ENTER DESCRIPTION  
EC NO.: IFG2014-0972  
DRAWN BY: SCHAEFER 2013/11/26  
CHKD: PMERUNKA 2014/06/10  
APPR: RSILLER 2014/06/10

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
▽=0	4 PLACES ± --- ± ---	MM ONLY	1:1	METRIC	
▽=0	3 PLACES ± --- ± ---				
	2 PLACES ± 0.05 ± ---				
	1 PLACE ± 0.10 ± ---				
	0 PLACE ± --- ± ---				
	ANGULAR ± .5 °				
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				

DRAWN BY: PMERUNKA	DATE: 2012/04/24	TITLE: CSE M12 XP AC FE RA XM SE UNSH
CHECKED BY: RSILLER	DATE: 2013/01/18	
APPROVED BY: CBURGER	DATE: 2013/07/16	
MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-120065-052	SHEET NO. 4 OF 4
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

10	9	8	7	6	5	4	3	2	1
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