

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0850130050](#)
Status: **Active**
Overview: [din_41612](#)
Description: 2.54mm (.100") Pitch DIN 41612 Header, Through Hole, Vertical, Style R/2 Reverse, 0.6µm (24µ") Selective Gold (Au), 32 Circuits, Lead free

Documents:

3D Model	Product Specification PS-85013-0001 (PDF)
Drawing (PDF)	RoHS Certificate of Compliance (PDF)

Agency Certification

CSA	LR19980
UL	E29179

General

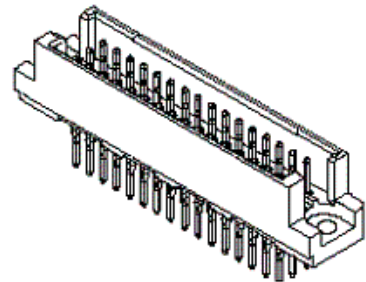
Product Family	Backplane Connectors
Series	85013
Application	Backplane
Component Type	PCB Header
Overview	din_41612
Product Name	IEC 603-2/DIN 41612
Style	R/2

Physical

Circuits (Loaded)	32
Circuits (maximum)	48
Circuits Detail	Rows A & C
Durability (mating cycles max)	400
First Mate / Last Break	No
Flammability	94V-0
Guide to Mating Part	No
Keying to Mating Part	Yes
Number of Columns	16
Number of Pairs	Open Pin Field
Number of Rows	3
Orientation	Vertical
PC Tail Length (in)	0.177 In
PC Tail Length (mm)	4.50 mm
PCB Locator	No
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Bag
Pitch - Mating Interface (in)	0.100 In
Pitch - Mating Interface (mm)	2.54 mm
Pitch - Term. Interface (in)	0.100 In
Pitch - Term. Interface (mm)	2.54 mm
Plating min: Mating (µin)	24
Plating min: Mating (µm)	0.6
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-55°C to +125°C

Electrical

Current - Maximum per Contact	2.5A
Data Rate	622.0 Mbps
Voltage - Maximum	1000V (RMS)



Series
image - Reference only

EU RoHS

**ELV and RoHS
Compliant**

REACH SVHC

Not Reviewed

Halogen-Free

Status

Not Reviewed

China RoHS



**Need more information on product
environmental compliance?**

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of
Compliance, [click here](#)

Please visit the [Contact Us](#) section for any
non-product compliance questions.

Search Parts in this Series

[85013Series](#)

Mates With

[85042](#) DIN 41612 Receptacle . [85052](#) DIN
41612 Header

Material Info

Reference - Drawing Numbers

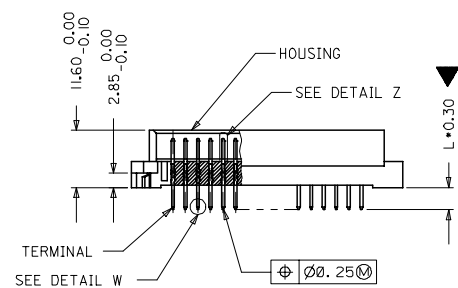
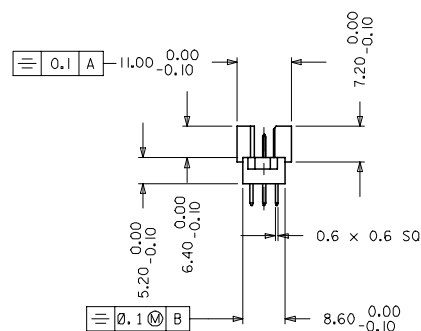
Product Specification
Sales Drawing

PS-85013-0001
E-85013-0002, E-85013-0050, SD-85013-0050,
SDA-85013-0002, SDA-85013-0050

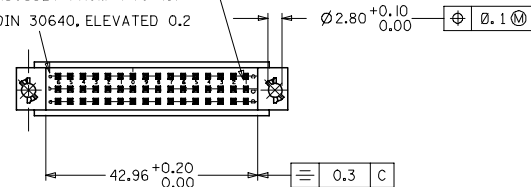
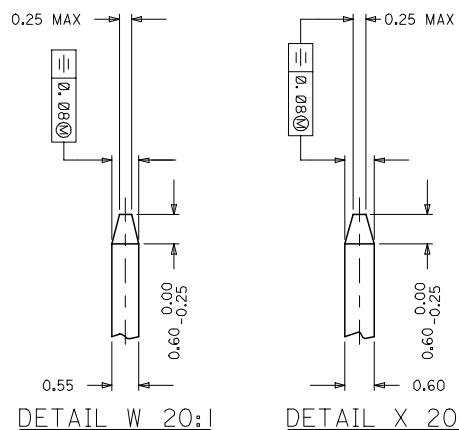
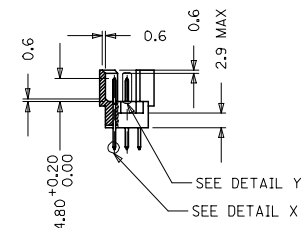
This document was generated on 05/17/2010

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1. MATERIAL NUMBER, BATCH CODE, UL CSA MARKING TO BE PRINTED ON THE CONNECTOR AS PER E-36502-005
2. PRODUCT SPECIFICATION PS:85013-001
3. PACKING SPECIFICATION PK: 36512-001
4. CUT FACES OF TIP WITHOUT PLATING IS PERMITTED
5. REFERENCE AREA OF PLATING
6. GAUGE DRAWING REFER E-36500-100



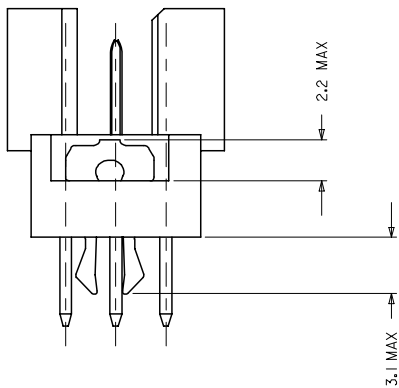
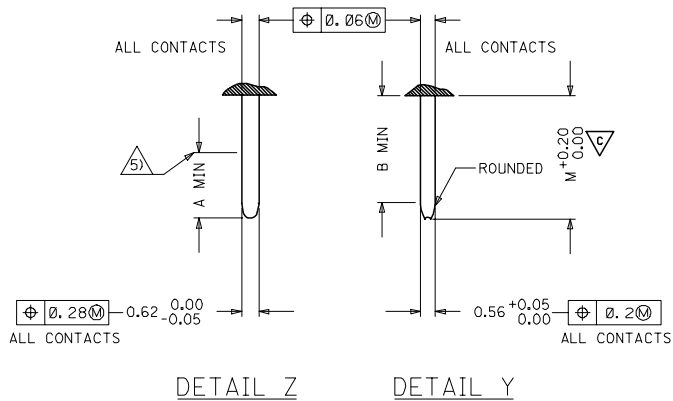
SCRIPT E1.5-6 DIN 30640, ELEVATED 0.2



QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION											
▽=1 ▽=0		<table><tr><td>mm</td><td>INCH</td></tr><tr><td>4 PLACES +</td><td>± .005</td></tr><tr><td>3 PLACES +</td><td>± .005</td></tr><tr><td>2 PLACES +</td><td>± .005</td></tr><tr><td>1 PLACE +</td><td>± .01</td></tr></table>		mm	INCH	4 PLACES +	± .005	3 PLACES +	± .005	2 PLACES +	± .005	1 PLACE +	± .01	DRAWN BY DATE NS 2004/03/31 CHECKED BY DATE GJLOWE 2004/03/31 APPROVED BY DATE GJLOWE 2004/03/31		TITLE 48 POS. MALE CONNECTOR ACC. DIN 41612 STYLE R/2 CONTACTS MOLEX INCORPORATED			
mm	INCH																		
4 PLACES +	± .005																		
3 PLACES +	± .005																		
2 PLACES +	± .005																		
1 PLACE +	± .01																		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ANGULAR ± 2 °		MATERIAL NO. SEE CHART		DOCUMENT NO. E-85013-0002		SHEET NO. 1 OF 2											
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			

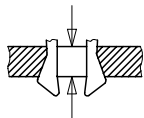
PRE MATING CONTACTS	5.4	4.1	4.8
NORMAL CONTACTS	4.8	3.5	4.2
	M	A	B

MALE CONNECTOR WITH MOUNTING CLIPS



CLIPS SNAP UNDER
PC - BOARD OF
1.5 to 1.8 mm
 $F_m < 60N$
 $F_r > 20N$
 $F_r > 200N$, WHEN
SOLDERED IN
PLATED - THROUGH
FIXING HOLES

F_m = MOUNTING FORCE
(FOR ONE CONNECTOR = 2 CLIPS)

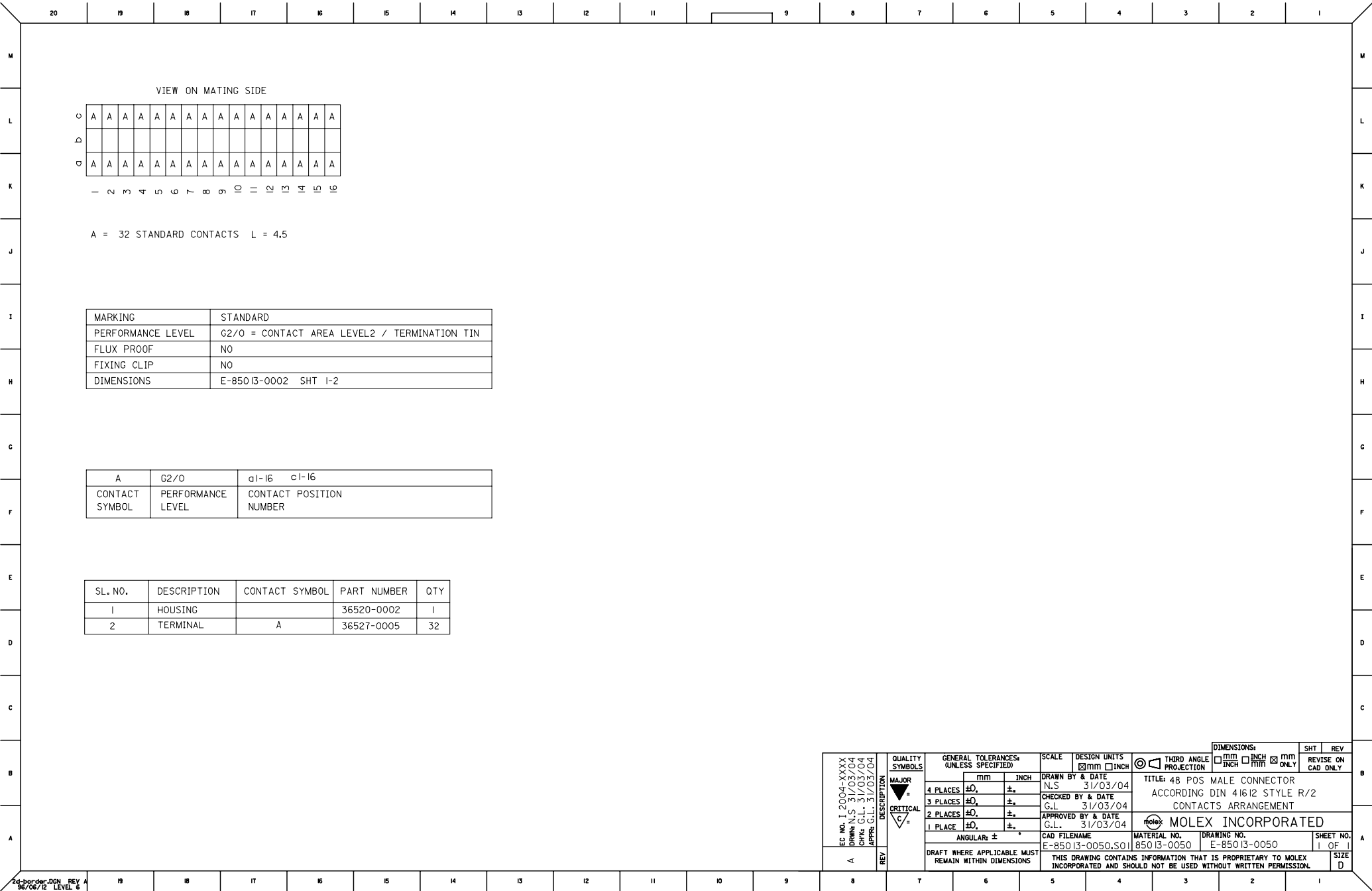


F_r = RETENTION FORCE
(FOR ONE CONNECTOR = 2 CLIPS)



CLIPS STICK IN
FIXING HOLE OF
PC - BOARDS
OVER 1.8 mm
 $F_m < 60N$
 $F_r > 16N$

EC NO: 12005-0092 DRAWN BY: DRWNGHIVASHA CHKD BY: CHKDRPRASAD APPR: SSUDHIR REV	2004/11/23 2004/11/23 2004/11/23	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=1	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	
						DRAWN BY NS		DATE 2004/03/31	TITLE 48 POS. MALE CONNECTOR ACC. DIN 41612 STYLE R/2 CONTACTS		
				4 PLACES ± 0.005		CHECKED BY GJLOWE		DATE 2004/03/31	MOLEX MOLEX INCORPORATED		
				3 PLACES ± 0.005		APPROVED BY GJLOWE		DATE 2004/03/31			
				2 PLACES ± 0.05							
				1 PLACE ± 0.1							
				ANGULAR ± 2 °		MATERIAL NO. SEE CHART		DOCUMENT NO. E-85013-0002	SHEET NO. 2 OF 2		
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



VIEW ON MATING SIDE

1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2																
3	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

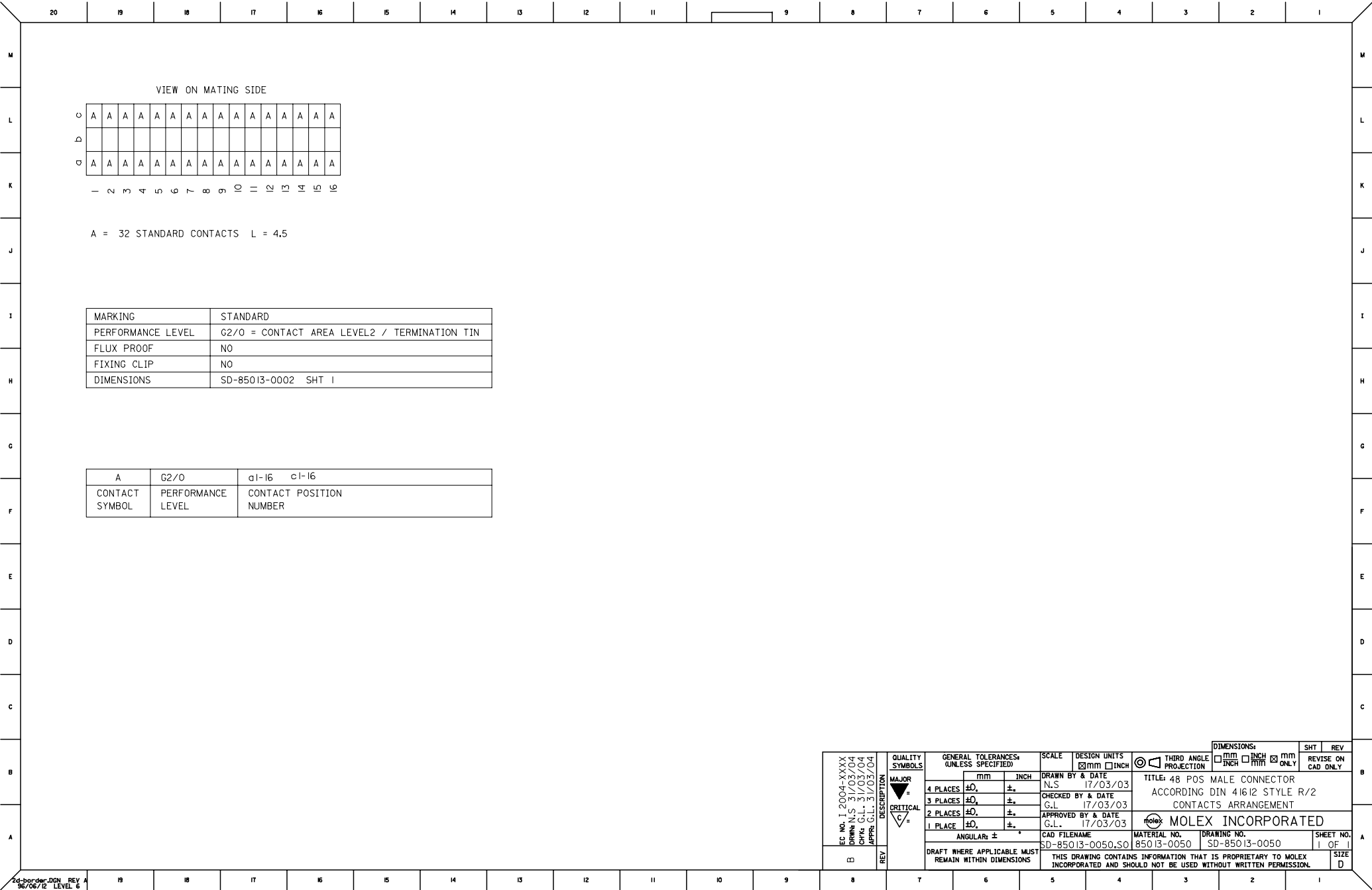
A = 32 STANDARD CONTACTS L = 4.5

MARKING	STANDARD
PERFORMANCE LEVEL	G2/0 = CONTACT AREA LEVEL2 / TERMINATION TIN
FLUX PROOF	NO
FIXING CLIP	NO
DIMENSIONS	E-85013-0002 SHT 1-2

A	G2/0	a1-16 c1-16
CONTACT SYMBOL	PERFORMANCE LEVEL	CONTACT POSITION NUMBER

SL. NO.	DESCRIPTION	CONTACT SYMBOL	PART NUMBER	QTY
1	HOUSING		36520-0002	1
2	TERMINAL	A	36527-0005	32

EC NO. I 2004-XXXX		QUALITY SYMBOLS MAJOR CRITICAL	GENERAL TOLERANCES (UNLESS SPECIFIED)	SCALE	DESIGN UNITS ☒ mm ☐ INCH		THIRD ANGLE PROJECTION	DIMENSIONS: ☐ mm ☐ INCH ☒ mm ONLY	SHT	REV			
EC NO. I 2004-XXXX													
CHK: G.L. 31/03/04													
APPR: G.L. 31/03/04													
A	REV	DESCRIPTION	mm		INCH		DRAWN BY & DATE N.S. 31/03/04						
			4 PLACES ± 0.1		$\pm .005$		CHECKED BY & DATE G.L. 31/03/04						
			3 PLACES ± 0.1		$\pm .005$		APPROVED BY & DATE G.L. 31/03/04						
			2 PLACES ± 0.1		$\pm .005$		 MOLEX INCORPORATED						
1 PLACE ± 0.1		$\pm .005$		CAD FILENAME E-85013-0050.S01				MATERIAL NO. 85013-0050		DRAWING NO. E-85013-0050		SHEET NO. 1 OF 1	
DRAFT HERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.									SIZE D	



VIEW ON MATING SIDE

1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2															
3	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

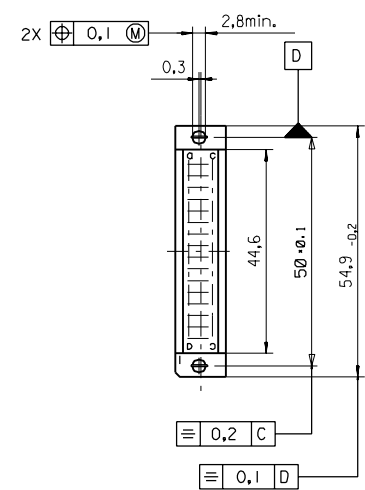
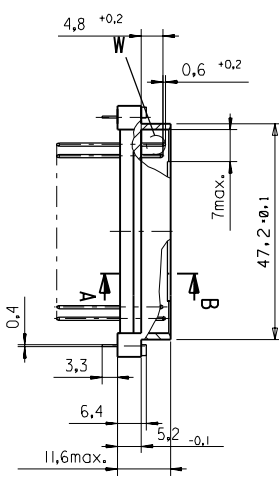
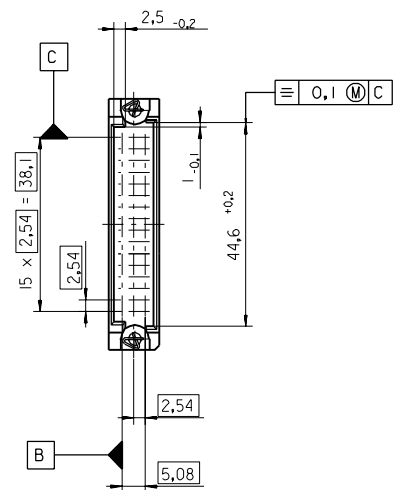
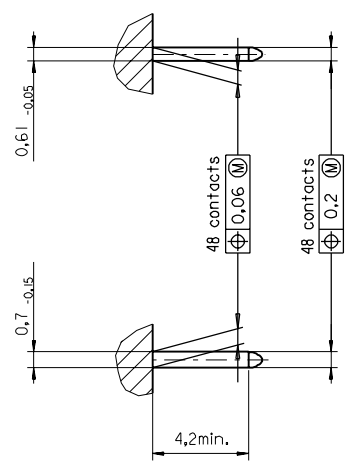
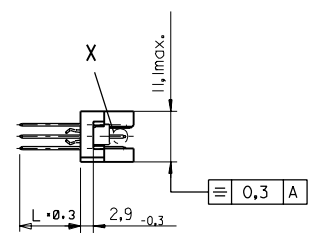
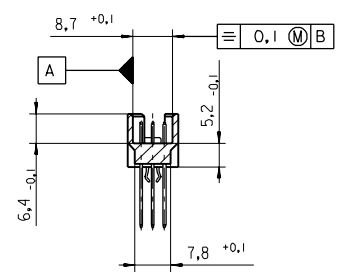
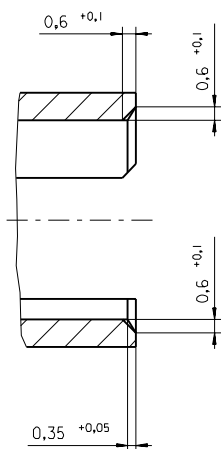
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

A = 32 STANDARD CONTACTS L = 4.5

MARKING	STANDARD
PERFORMANCE LEVEL	G2/O = CONTACT AREA LEVEL2 / TERMINATION TIN
FLUX PROOF	NO
FIXING CLIP	NO
DIMENSIONS	SD-85013-0002 SHT 1

A	G2/O	a1-16 c1-16
CONTACT SYMBOL	PERFORMANCE LEVEL	CONTACT POSITION NUMBER

EC NO. I 2004-XXXX DRAWN NLS 31/03/04 CHKD G.L. 31/03/04 APPR. G.L. 31/03/04		QUALITY SYMBOLS MAJOR CRITICAL	GENERAL TOLERANCES (UNLESS SPECIFIED)		SCALE	DESIGN UNITS mm INCH	 THIRD ANGLE PROJECTION	DIMENSIONS: mm INCH mm ONLY		SHT	REV		
B	REV	DESCRIPTION	mm INCH		DRAWN BY & DATE NLS 17/03/03		TITLE: 48 POS MALE CONNECTOR ACCORDING DIN 41612 STYLE R/2 CONTACTS ARRANGEMENT						
			4 PLACES .00 ±		CHECKED BY & DATE G.L. 17/03/03								
			3 PLACES .00 ±		APPROVED BY & DATE G.L. 17/03/03								
			2 PLACES .00 ±		MATERIAL NO. 85013-0050								
			1 PLACE .00 ±		CAD FILENAME SD-85013-0050.S01		DRAWING NO. SD-85013-0050		SHEET NO. 1 OF 1				
ANGULAR ± °			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.		SIZE D



FIRST ANGLE PROJECTION		REVISE ONLY ON CAD SYSTEM		SH.	REV.
first release see ECN No. 1887	LTR REVISIONS FOR PREVIOUS REVISIONS SEE MRI LIST	UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 2°	DRWG BY Ca	CAD/CAM PROJECT NAME 85013000 621	
		INCH METRIC	CHK'D BY KN	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
		3 PLACE ± . ±	APP'D BY	TITLE 48 pos. Male connector acc. DIN 41612 style R/2 Dimensions	
		2 PLACE ± . ±	SCALE	SHEET NO. DATE 1 OF 95/06/08	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX EUROPE	
		DESIGN DIMENSION ☒ MM		PART NO.	
		EQUIVALENT DIMENSION ☐ MM		DWG NO.	
		IF TWO DIMENSIONS ARE SHOWN THE UPPER IS THE DESIGN DIMENSION, LOWER IS SECONDARY		SDA-85013-0002	
				SIZE B	

A	∇	∇	∇
B	∇	∇	∇
C	∇	∇	∇

1	0.0000
2	0.0000
3	0.0000
4	0.0000
5	0.0000
6	0.0000
7	0.0000
8	0.0000
9	0.0000
10	0.0000
11	0.0000
12	0.0000
13	0.0000
14	0.0000
15	0.0000
16	0.0000

A = 32 STANDARD CONTACTS L = 4.5

Marking	Standard
Performance level	G2/0 = Contact area perform. level2 / Termination tin
Flux proof	no
Fixing clip	no
Dimensions	SDA-85013-0002 sht.1
Technical Data	PS-85013-0001

[illegible]

first release see ECN No. 1868	REVISIONS	FOR PREVIOUS REVISIONS SEE MRJ LIST		UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR $\pm 2^\circ$ INCH METRIC		DRWG BY	SIGN	CAD/CAM PROJECT NAME 8501300 S51	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SH. REV.
		DESIGN DIMENSION ☐ MM ☐ IN.		EQUIVALENT DIMENSION ☐ MM ☐ IN. IF TWO DIMENSIONS ARE SHOWN, THE UPPER IS THE DESIGN DIMENSION, LOWER IS SECONDARY		SCALE	SIGN			
2 PLACE $\pm .$ $\pm$		KN	SIGN							
1 PLACE $\pm .$ $\pm$										
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APP'D BY	SIGN							
TITLE		MOLEX® MOLEX EUROPE		SHEET NO. DATE	PART NO. DWG NO.		SIZE			
48 pos. Male connector acc. DIN 41612 style R/2 contacts arrangement				1 OF 1	85013-0050 SDA-85013-0050		A			