

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0850131029](#)
Status: **Active**
Overview: [din_41612](#)
Description: 2.54mm (.100") Pitch DIN 41612 Header, Style R/2 Reverse, 0.6µm (24µ") Selective Gold (Au), 48 Circuits, with Beveled Metal Pins, Lead free

Documents:

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Drawing \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

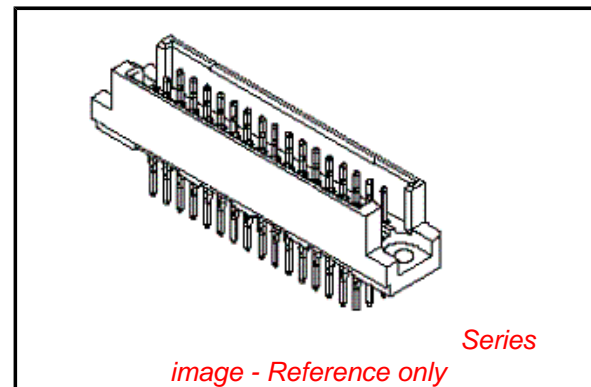
Product Family Backplane Connectors
 Series [85013](#)
 Application Backplane
 Component Type PCB Header
 Overview [din_41612](#)
 Product Name IEC 603-2/DIN 41612
 Style R/2

Physical

Circuits (Loaded) 48
 Circuits (maximum) 48
 Circuits Detail Rows A, B, & 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) 0.114 In
 PC Tail Length (mm) 2.90 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 1.5A
 Data Rate 622.0 Mbps
 Voltage - Maximum 1000V (RMS)



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

Sales Drawing

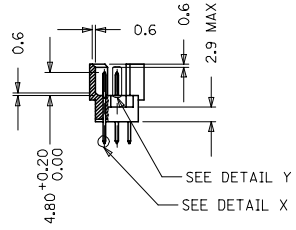
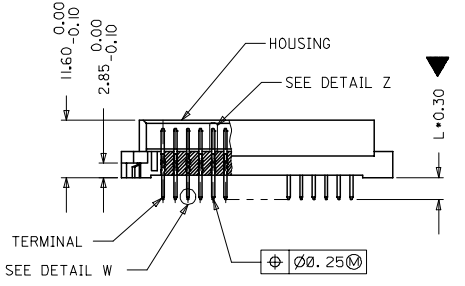
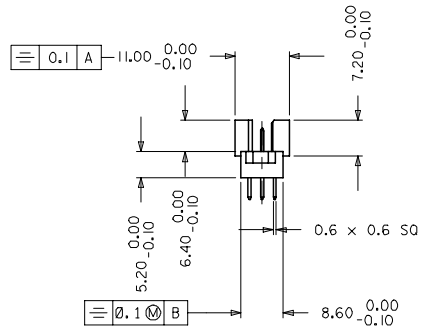
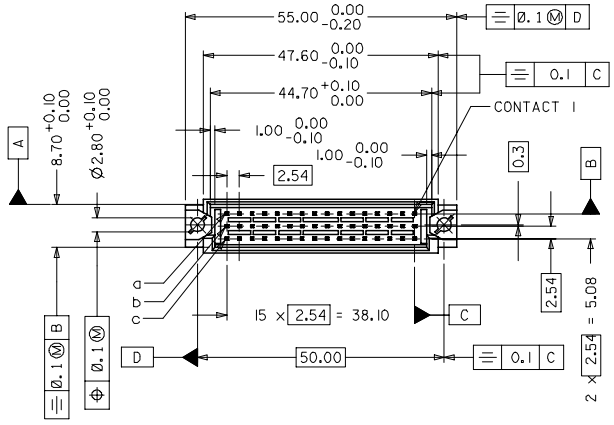
E-85013-0002, E-85013-1029, SD-85013-0002,
SD-85013-1029, SDA-85013-0002, SDA-85013-1029

This document was generated on 05/17/2010

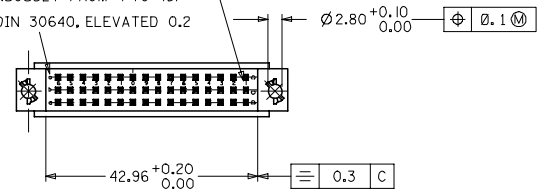
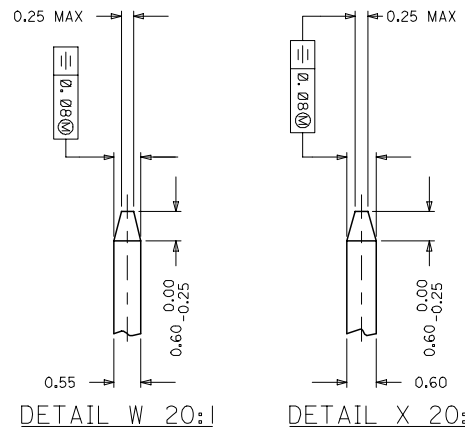
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

NOTES:

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



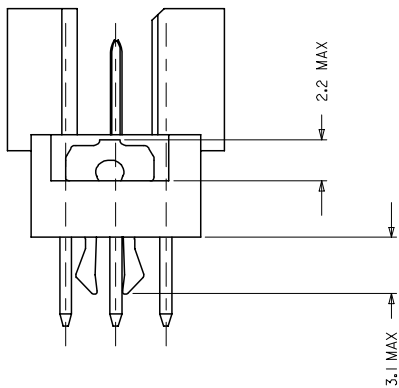
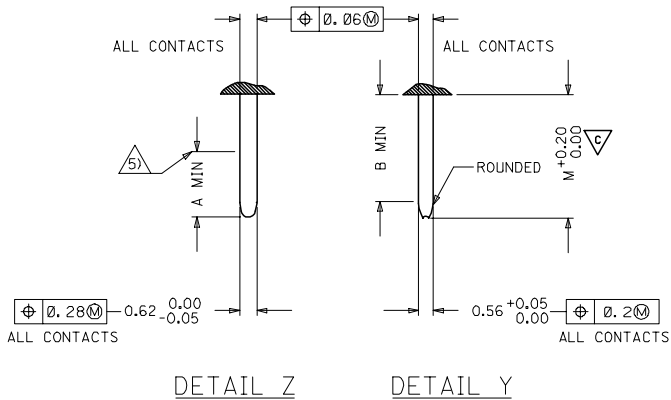
SCRIPT E1.25-5 DIN 30640, ELEVATED 0.2
 (NUMBERED CONTINUOUSLY FROM 1 TO 16)
 SCRIPT E1.5-6 DIN 30640, ELEVATED 0.2



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

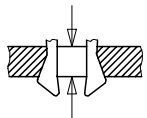
PRE MATING CONTACTS	5.4	4.1	4.8
NORMAL CONTACTS	4.8	3.5	4.2
	M	A	B

MALE CONNECTOR WITH MOUNTING CLIPS



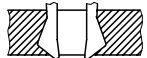
CLIPS SNAP UNDER
PC - BOARD OF
1.5 to 1.8 mm
 $F_m < 60N$
 $F_r >= 20N$
 $F_r >= 200N$, WHEN
SOLDERED IN
PLATED - THROUGH
FIXING HOLES

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



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

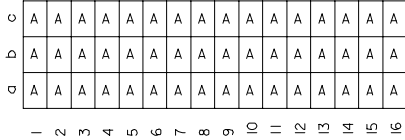
CLIPS STICK IN
FIXING HOLE OF
PC - BOARDS
OVER 1.8 mm
 $F_m < 60N$
 $F_r >= 16N$



IEC NO. 12005-0092 2004/11/23 DR:RNISHIVASHA CH:KADAPRASAD APPR:SSUDHIR 2004/11/23	QUALITY SYMBOLS $\nabla=0$ $\nabla=1$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± 0.005 ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.1 ± --- ANGULAR ± 2 °	mm INCH	DRAWN BY NS	DATE 2004/03/31	TITLE 48 POS. MALE CONNECTOR ACC. DIN 41612 STYLE R/2 CONTACTS	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART	MATERIAL NO. E-85013-0002	DOCUMENT NO. MOLEX INCORPORATED	SHEET NO. 2 OF 2

20 19 18 17 16 15 14 13 12 11 9 8 7 6 5 4 3 2 1

VIEW ON MATING SIDE



A = 48 STANDARD CONTACTS L = 2.9

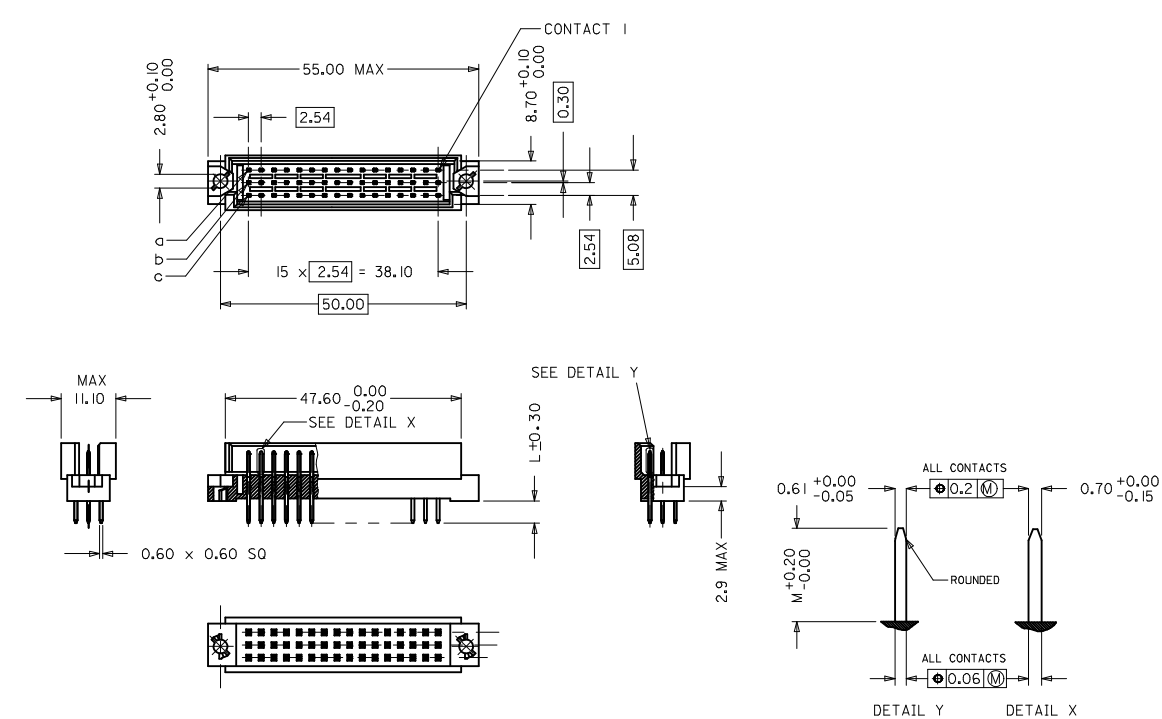
MARKING	STANDARD
PERFORMANCE LEVEL	G2/0 = CONTACT AREA LEVEL2 / TERMINATION TIN
FLUX PROOF	NO
FIXING CLIP	YES
DIMENSIONS	SD-85013-0002 SHT 1

A	G2/0	a1-16 b1-16 c1-16
CONTACT SYMBOL	PERFORMANCE LEVEL	CONTACT POSITION NUMBER

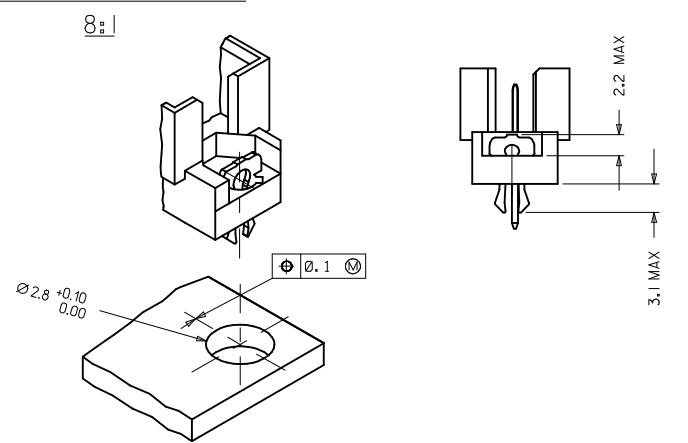
SL. NO.	DESCRIPTION	CONTACT SYMBOL	PART NUMBER	QTY
1	HOUSING		36520-0002	1
2	TERMINAL	A	36527-0005	48
3	FIXING CLIP	B	36526-0001	2

EC NO. I 2004-XXXX DRAWN: S 31/03/04 CHK: G.L. 31/03/04 APPR: L. 31/03/04	QUALITY SYMBOLS	GENERAL TOLERANCES: (UNLESS SPECIFIED)	SCALE	DESIGN UNITS	DIMENSIONS:	SHT	REV
	MAJOR	mm INCH	1:1	mm INCH	mm INCH mm ONLY		
	CRITICAL	4 PLACES ±0. ±					
		3 PLACES ±0. ±					
	2 PLACES ±0. ±						
	1 PLACE ±0. ±						
	ANGULAR: ±						
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CAD FILENAME		MATERIAL NO.	DRAWING NO.	SHEET NO.	
		E-85013-1029.S01		85013-1029	E-85013-1029	1 OF 1	
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.					
		INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.					

24-border.DGN REV A 96/06/12 LEVEL 6 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1



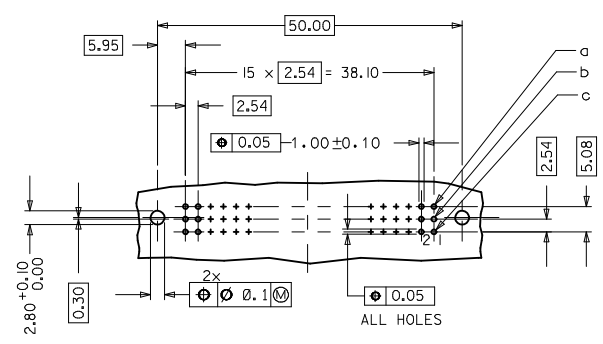
WITH MOUNTING CLIPS



- NOTES:
- 1) MATERIALS: THERMOPLASTIC POLYESTER, GLASS FILLED, UL94V-0. COLOUR: PEBBLE GREY RAL 7032
TERMINAL - BRASS
MOUNTING CLIP: STEEL
 - 2) FINISH: CONTACT AREA
 1. PERFORMANCE LEVEL 1: SELECTIVE GOLD (Au), THICKNESS = 1.1 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER
 2. PERFORMANCE LEVEL 2: SELECTIVE GOLD (Au), THICKNESS = 0.6 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER
 3. PERFORMANCE LEVEL 3: SELECTIVE GOLD (Au), THICKNESS = 0.3 MICROMETER OVER NICKEL, THICKNESS = 1.25 MICROMETER
 - 3) MOUNTING CLIP:-
TIN (Sn), THICKNESS = 5-10 MICROMETER,
OVER NICKEL (Ni), THICKNESS = 2.5 MICROMETER
 - 4) FOR NON MOUNTING CLIP OPTION, CONNECTOR TO BE SECURED WITH RIVETS: 2 TUBULAR RIVETS 2.5 x 0.3 ... DIN 7340
SCREWS: 2 CHEESEHEAD SCREWS M2.5 x ... DIN 84 AND 2 HEXAGONAL NUTS M2.5 DIN 934
 - 5) STANDARD MARKING : MOLEX, MATERIAL NUMBER, BATCH CODE
 - 6) CUT FACE OF TIP WITHOUT PLATING PERMITTED
 - 7) PRODUCT SPECIFICATION PS : 85103-0001

RECOMMENDED PCB LAYOUT
COMPONENT SIDE

LMFB CONTACTS	4,2
FMLB CONTACTS	5,4
NORMAL CONTACTS	4,8
	M

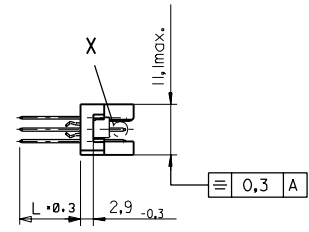
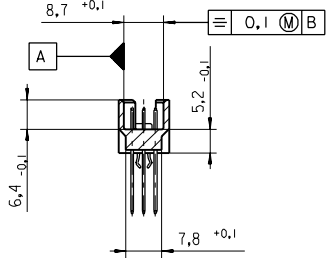
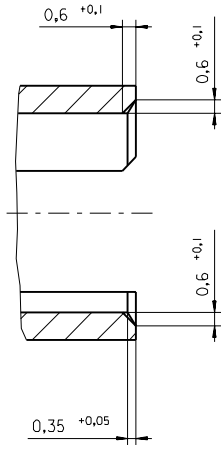


RoHS COMPLIANT

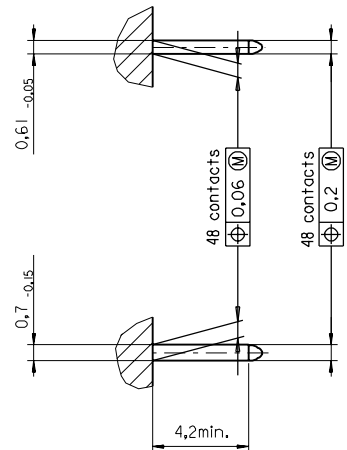
EC NO: I2007-0172 DRAWN BY: JAYENGG CHKD BY: SUDHIR APPR: KRASAO 2009/06/07 2009/06/19 2009/01/22	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± 0.05 ± --- 2 PLACES ± 0.1 ± --- 1 PLACE ± 0.15 ± --- ANGULAR ± 2 °	DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART	TITLE 48 POS. MALE CONNECTOR ACC. DIN 41612 STYLE R/2 CONTACTS	MOLEX INCORPORATED	SHEET NO. 1 OF 1
		MATERIAL NO.	DOCUMENT NO.	SD-85013-0002	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
		SIZE A1	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

PART NO.
DWG. NO.

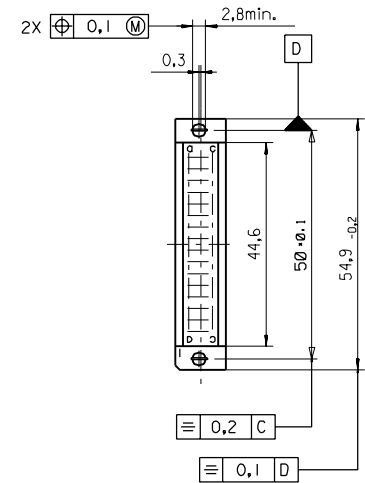
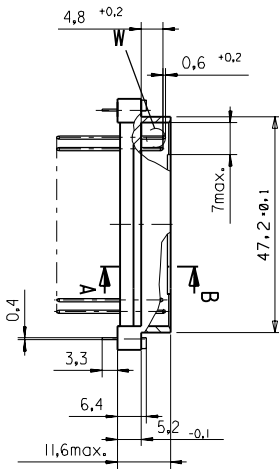
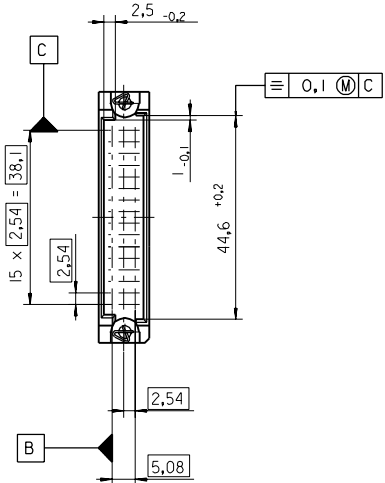
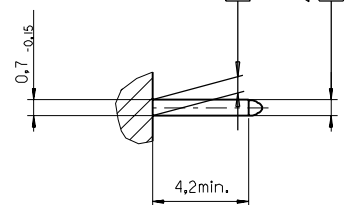
Section A - B
5:1



View X
5:1



View W
5:1



BI	LTR	first release see ECN No. 1887	FIRST ANGLE PROJECTION		REVISE ONLY ON CAD SYSTEM		SH.	REV.
		FOR PREVIOUS REVISIONS SEE MRI LIST	UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 2°	DRWG BY Ca	SIGN	CAD/CAM PROJECT NAME 85013000 821	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
			INCH	METRIC	CHK'D BY KN	SIGN	TITLE 48 pos. Male connector acc. DIN 41612 style R/2 Dimensions	
			3 PLACE ± . ±	±	APP'D BY	SIGN	SHEET NO. DATE 1 OF 95/06/08	
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SCALE		PART NO. DWG NO. SIZE	
			DESIGN DIMENSION	<input checked="" type="checkbox"/> MM <input type="checkbox"/> IN.			SDA-85013-0002 B	
			EQUIVALENT DIMENSION	<input type="checkbox"/> MM <input type="checkbox"/> IN.				
			IF TWO DIMENSIONS ARE SHOWN THE UPPER IS THE DESIGN DIMENSION, LOWER IS SECONDARY					

VIEW ON MATING SIDE

⊂	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
⊃	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
⊄	A	A	A	A	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 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

A = 48 STANDARD CONTACTS L-2,9

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

A	G2/0	a1-16	b1-16	c1-16
Contact symbol	Perform. level	Contact position number		

first release see ECN No. 2351	REVISIONS		FOR PREVIOUS REVISIONS SEE MRI LIST	
	LTR	Δ		
UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 2° INCH METRIC		DRWG BY	SIGN	
3 PLACE ± .	±	Ca		
2 PLACE ± .	±	CHK'D BY	SIGN	
1 PLACE ± .	±	KN		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APP'D BY	SIGN	
DESIGN DIMENSION	<input type="checkbox"/> MM <input type="checkbox"/> IN.	JB		
EQUIVALENT DIMENSION	<input type="checkbox"/> MM <input type="checkbox"/> IN.	SCALE		
IF TWO DIMENSIONS ARE SHOWN, THE UPPER IS THE DESIGN DIMENSION, LOWER IS SECONDARY				
REVISE ONLY ON CAD SYSTEM		SH. REV.		
CAD/CAM PROJECT NAME		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
s8501310		s21		
TITLE		SHEET NO.		DATE
48 pos. Male connector acc. DIN 41612 style R/2 contacts arrangement		1 OF 1		96/12/05
MOLEX EUROPE		DWG NO.		SIZE
PART NO.		SDA-85013-1029		A