

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0554501269](#)  
**Status:** **Active**  
**Description:** 1.25mm (.049") Pitch Mi II™ System Wire-to-Board Header, SMT, Single Row, Vertical, Without Plastic Peg, Lead-free, 12 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-54596-022 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

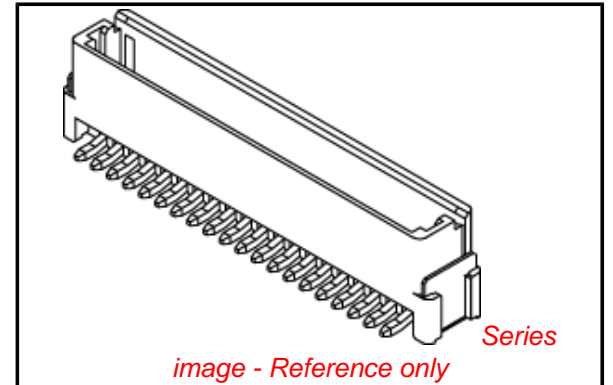
Product Family PCB Headers  
 Series [55450](#)  
 Application Wire-to-Board  
 Product Name Mini Mi II™

**Physical**

Breakaway No  
 Circuits (Loaded) 12  
 Circuits (maximum) 12  
 Color - Resin Natural  
 Durability (mating cycles max) 30  
 First Mate / Last Break No  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part Yes  
 Mated Height (in) 0.331 In  
 Mated Height (mm) 8.40 mm  
 Material - Metal Brass  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 1  
 Orientation Vertical  
 PC Tail Length (in) 0.000 In  
 PC Tail Length (mm) 0.00 mm  
 PCB Locator No  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.000 In  
 PCB Thickness Recommended (mm) 0.00 mm  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.049 In  
 Pitch - Mating Interface (mm) 1.25 mm  
 Pitch - Term. Interface (in) 0.049 In  
 Pitch - Term. Interface (mm) 1.25 mm  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Shrouded Closed Ends  
 Stackable No  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Surface Mount

**Electrical**

Current - Maximum per Contact 1.5A, 1A  
 Voltage - Maximum 100V AC (RMS)/DC



**EU RoHS**

**ELV and RoHS  
 Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free  
 Status**

**China RoHS**



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

Email [productcompliance@molex.com](mailto: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**

[55450Series](#)

**Mates With**

[54596 IDT Receptacle Housing](#)

**Material Info**

**Reference - Drawing Numbers**

Product Specification

Sales Drawing

PS-54596-022, RPS-54596-025, RPS-54596-026

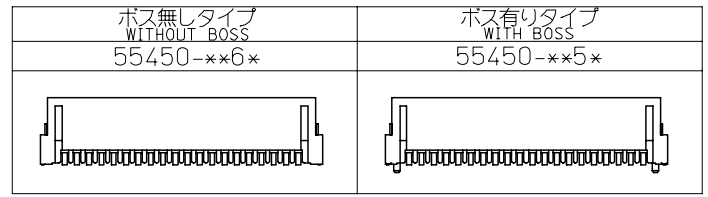
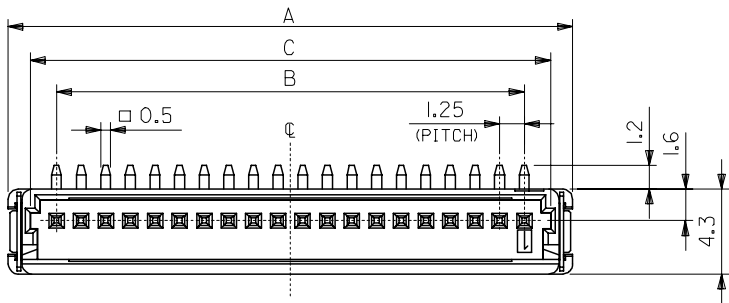
SD-55450-010, SD-55450-011

This document was generated on 04/16/2010

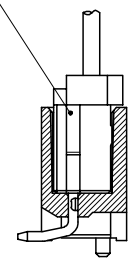
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10 9 8 7 6 5 4 3 2 1

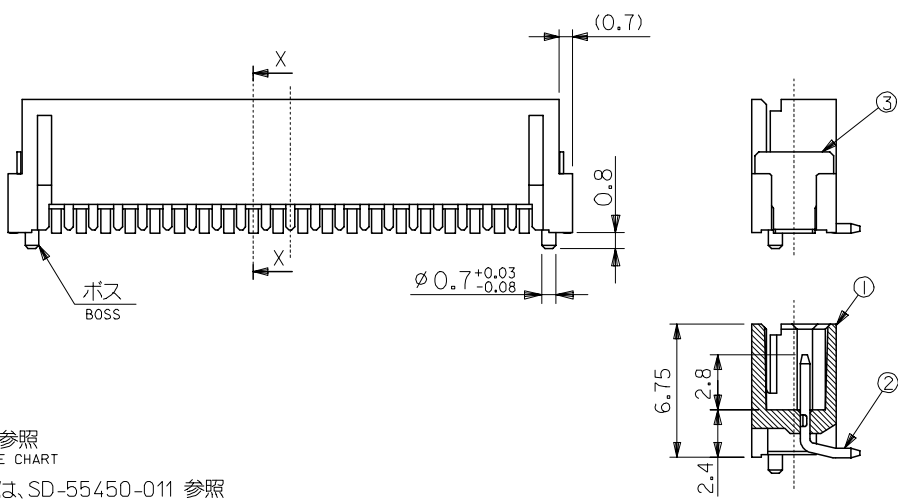
番号 NO.	名称 NAME	原料 MATERIAL	数量 QTY	仕上げ FINISH
①	ウエハー WAFER	ナイロン NYLON	1	UL94V-0
②	ピン PIN	黄銅 BRASS	N	全体錫メッキ PRE-TINNED
③	フィッティングネール FITTING NAIL	黄銅 BRASS	2	錫メッキ TIN PLATING



54596-\*\*\*  
リセプトフルアセンブリ  
REC. ASS'Y



嵌合図  
MATING REC.



断面 X-X  
SECTION X-X

27.05	26.25	26.4	23.75	28.65	20	55450-20**
25.8	25	25.15	22.5	27.4	19	-19**
24.55	23.75	23.9	21.25	26.15	18	-18**
23.3	22.5	22.65	20	24.9	17	-17**
22.05	21.25	21.4	18.75	23.65	16	-16**
20.8	20	20.15	17.5	22.4	15	-15**
19.55	18.75	18.9	16.25	21.15	14	-14**
18.3	17.5	17.65	15	19.9	13	-13**
17.05	16.25	16.4	13.75	18.65	12	-12**
15.8	15	15.15	12.5	17.4	11	-11**
14.55	13.75	13.9	11.25	16.15	10	-10**
13.3	12.5	12.65	10	14.9	9	-09**
12.05	11.25	11.4	8.75	13.65	8	-08**
10.8	10	10.15	7.5	12.4	7	-07**
9.55	8.75	8.9	6.25	11.15	6	-06**
8.3	7.5	7.65	5	9.9	5	-05**
7.05	6.25	6.4	3.75	8.65	4	-04**
5.8	5	5.15	2.5	7.4	3	-03**
4.55	3.75	3.9	1.25	6.15	2	55450-02**
E	D	C	B	A	極数 CIRCUIT SIZE	△ 製品番号 MATERIAL NO.

注) NOTES

- 原料および仕上げ: 表参照  
MATERIAL AND FINISH: SEE CHART
  - エンボス梱包品の詳細は、SD-55450-011 参照  
REFER TO THE SD-55450-011 FOR THE EMBOSSED PACKAGING.
  - 端子平坦度は 0.15 MA X. とする。  
COPLANALITY TO BE 0.15 MAX.
- △ 製品番号  
MATERIAL NO.  
55450-\*\*\*\*
- 極数 CIRCUIT SIZE (02 ~ 20)
- ボス BOSS 5: ボス有り WITH BOSS  
6: ボス無し WITHOUT BOSS
- 色 COLOR 0: 自然色 NATURAL
5. 本製品は 55450-\*\*10/\*\*30/\*\*70/\*\*80 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 55450-\*\*10/\*\*30/\*\*70/\*\*80.

REVISED EC NO: J2007-0566 DRWN: OTANI CHKD: NUKITA APPR: NUKITA	DESCRIPTION A	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	±0.2	DRAWN BY N. AIDA	DATE '05/02/01	TITLE MINI M12 1-ROW SMT WAFER ASS'Y (TIN) -LEAD FREE-		MOLEX INCORPORATED	
10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE '05/02/01	APPROVED BY N. UKITA		DATE '05/02/01	DOCUMENT NO. SD-55450-010		SHEET NO. 1 OF 2
30 OVER	±0.3	MATERIAL NO. SEE CHART		APPROVED BY N. UKITA		DATE '05/02/01	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3					

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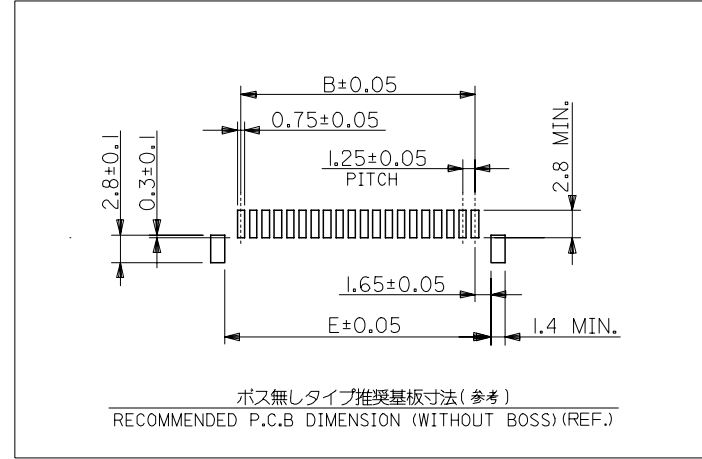
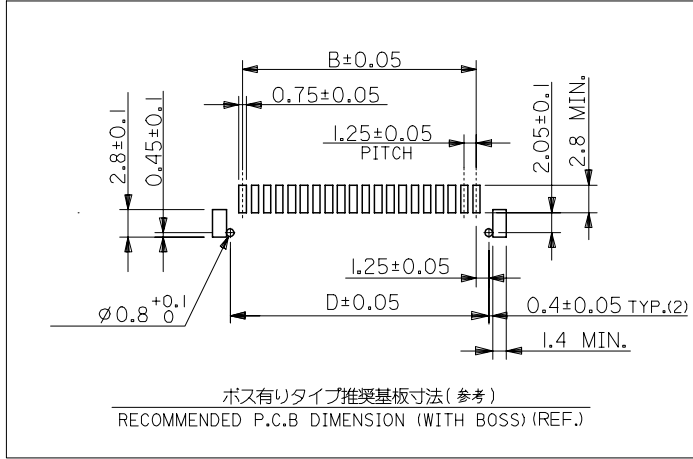
C

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REVISED EC NO: J2007-0566 DRWN: OTANI 2006/09/01 CHK: NUKITA 2006/09/05 APPR: NUKITA 2006/09/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY N.AIDA	DATE '05/02/01	TITLE MINI M12 1-ROW SMT WAFER ASS'Y (TIN) -LEAD FREE-			
	10 OVER 30 UNDER	±0.25	CHECKED BY K.TOJO	DATE '05/02/01				
	30 OVER	±0.3	APPROVED BY N.NUKITA	DATE '05/02/01	MOLEX INCORPORATED			
	ANGULAR	±3 °	MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	SEE CHART	SD-55450-010	2 OF 2			

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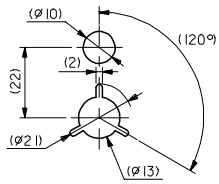
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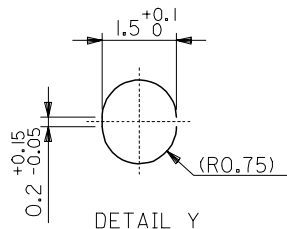
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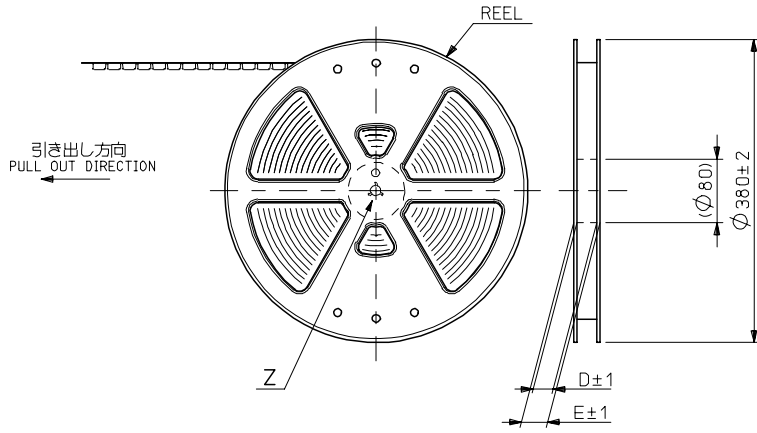
10 9 8 7 6 5 4 3 2 1



DETAIL Z



DETAIL Y  
(10:1)

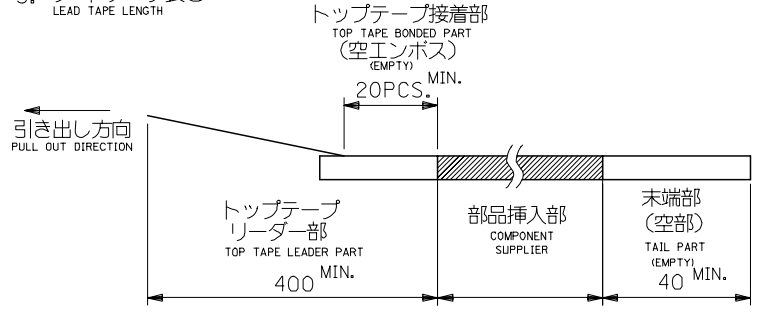


引き出し方向  
PULL OUT DIRECTION

引き出し方向  
PULL OUT DIRECTION

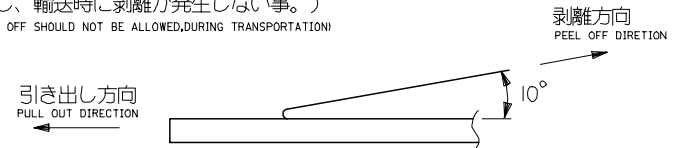
注)  
NOTES

- 製品番号 55450-\*\*\*\* の詳細寸法については、SD-55450-010 を参照下さい。  
IN THE PACKAGE, PART NO. 55450-\*\*\*\* DETAILED DIMENSIONS, SEE SD-55450-010.
- 梱包数量 : 880個/リール  
NUMBER OF CONNECTORS : 880 PCS/REEL
- リードテープ長さ  
LEAD TAPE LENGTH



- トップテープの剥離強度 (剥離方向は下図参照)  
PEELING OFF FORCE OF TOP TAPE (PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
0.1~1.3N ( 10~130gf )

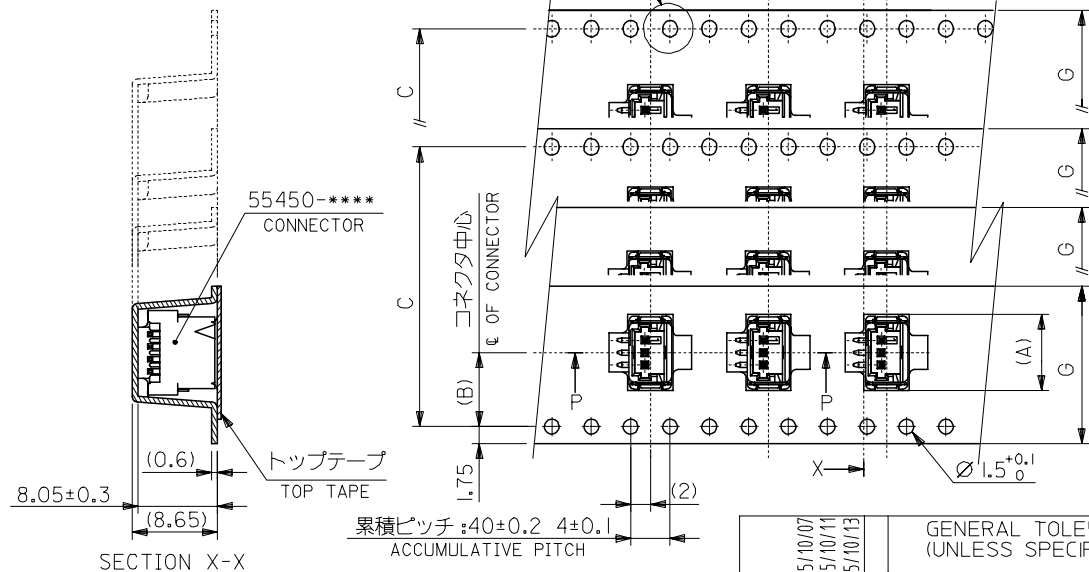
尚、本規格値は、出荷時に適用。  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT  
(但し、輸送時に剥離が発生しない事。)  
(PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION)



- 材料  
MATERIAL  
キャリアテープ : ポリプロピレン (PP)  
CARRIER TAPE : POLYPROPYLENE (PP)  
トップテープ : PET, PE, PEF  
TOP TAPE : PET, PE, PEF  
リール : ポリスチレン  
REEL : POLYSTYRENE

△ テープ巾32, 44mmに適用。  
THIS DIMENSION SHOULD BE APPLIED AT TAPE WIDTH OF 32, 44mm

- 本製品は 55450-xx19/xx39/xx79/xx89 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 55450-xx19/xx39/xx79/xx89.



SECTION X-X

REVISED EC NO: J2006-1116 DRW: N. SUZUKI CHK: K. TOYODA APP: N. UKITA REV A	DESCRIPTION 2005/10/07 2005/10/11 2005/10/13	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	± ---	DRAWN BY N. AIDA	DATE '05/02/01	TITLE EMBOSSD TAPE PACKAGE FOR 55450-**** -LEAD FREE-			
		10 OVER 30 UNDER	± ---	CHECKED BY K. TOJO	DATE '05/02/01	MOLEX INCORPORATED			
		30 OVER	± ---	APPROVED BY N. UKITA	DATE '05/02/01	DOCUMENT NO. SD-55450-011		SHEET NO. 1 OF 3	
		ANGULAR	± --- °	MATERIAL NO. SEE CHART					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		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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F

E

E

D

D

C

C

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A

A

G	F	E	(D)	C	(B)	(A)	CONNECTOR	エンボス梱包品 製品番号 MATERIAL NO.	MODEL NO.	CONNECTOR	エンボス梱包品 製品番号 MATERIAL NO.	MODEL NO.	極数 CIRCUIT SIZE	量産対応 AVAILABLE
44	3	49.4	45.4	40.4	20.2	28.95	55450-2060	55450-2069	55450-**69 ボス無し WITHOUT BOSS	55450-2050	55450-2059	55450-**59 ボス有り WITH BOSS	20	OK
						27.7	-1960	-1969		-1950	-1959		19	NO
						26.45	-1860	-1869		-1850	-1859		18	OK
						25.2	-1760	-1769		-1750	-1759		17	NO
						23.95	-1660	-1669		-1650	-1659		16	OK
						22.7	-1560	-1569		-1550	-1559		15	OK
						21.45	-1460	-1469		-1450	-1459		14	OK
32	2	37.4	33.4	28.4	14.2	20.2	-1360	-1369	-1350	-1359	13	OK		
						18.95	-1260	-1269	-1250	-1259	12	OK		
						17.7	-1160	-1169	-1150	-1159	11	OK		
						16.45	-1060	-1069	-1050	-1059	10	OK		
24	2	29.4	25.4	11.5	15.2	-0960	-0969	-0950	-0959	9	NO			
					13.95	-0860	-0869	-0850	-0859	8	OK			
					12.7	-0760	-0769	-0750	-0759	7	OK			
					11.45	-0660	-0669	-0650	-0659	6	OK			
					10.2	-0560	-0569	-0550	-0559	5	OK			
					8.95	-0460	-0469	-0450	-0459	4	NO			
16	2	21.4	17.4	7.5	7.7	-0360	-0369	-0350	-0359	3	OK			
					6.45	55450-0260	55450-0269	55450-0250	55450-0259	2	OK			

REVISED EC NO: J2006-1116 DRW: NESUZUKI CHK: KATOYODA APP: NUKITA	2005/10/07 2005/10/11 2005/10/13	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			10 UNDER	± ---	DRAWN BY N. AIDA	DATE '05/02/01	TITLE EMBOSSSED TAPE PACKAGE FOR 55450-**** -LEAD FREE-			
			10 OVER 30 UNDER	± ---	CHECKED BY K. TOJO	DATE '05/02/01	MOLEX INCORPORATED			
			30 OVER	± ---	APPROVED BY N. UKITA	DATE '05/02/01	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-55450-011	SHEET NO. 2 OF 3
ANGULAR ± --- °			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		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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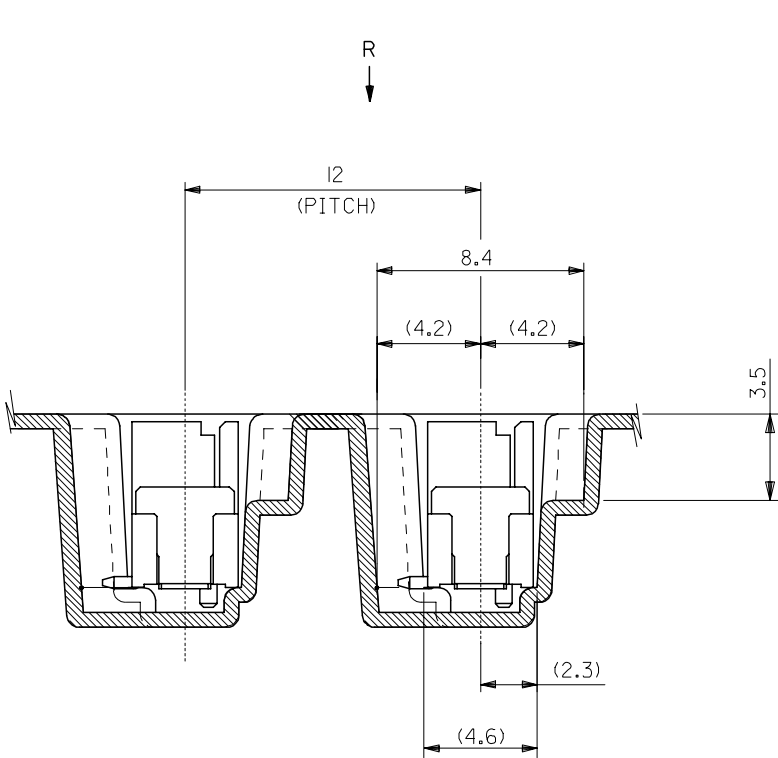
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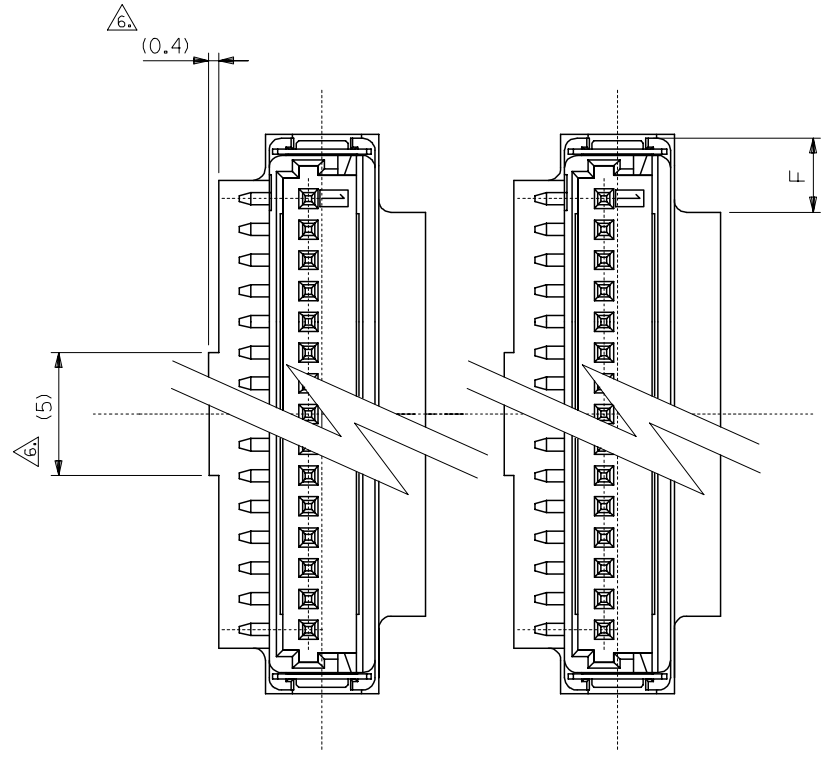
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SECTION P-P  
(5:1)



VIEW R  
(5:1)

REVISED EC NO: J2006-1116 DRW: N. SUZUKI CHK: K. TOYODA APPR: N. UKITA	2005/10/07 2005/10/11 2005/10/13	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 5:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
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		10 OVER 30 UNDER	± ---	CHECKED BY K. TOJO	DATE '05/02/01					
		30 OVER	± ---	APPROVED BY N. UKITA	DATE '05/02/01	MOLEX INCORPORATED				
		ANGULAR	± --- °	MATERIAL NO.	DOCUMENT NO.					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-55450-011		3 OF 3				

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