

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

**Part Number:** [0554500869](#)  
**Status:** **Active**  
**Description:** 1.25mm (.049") Pitch Mi II™ System Wire-to-Board Header, SMT, Single Row, Vertical, 8 Circuits, without Plastic Peg, Lead-free

**Documents:**

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

**General**

Product Family	PCB Headers
Series	<a href="#">55450</a>
Application	Wire-to-Board
MolexKits	Yes
Product Name	Mini Mi II™

**Physical**

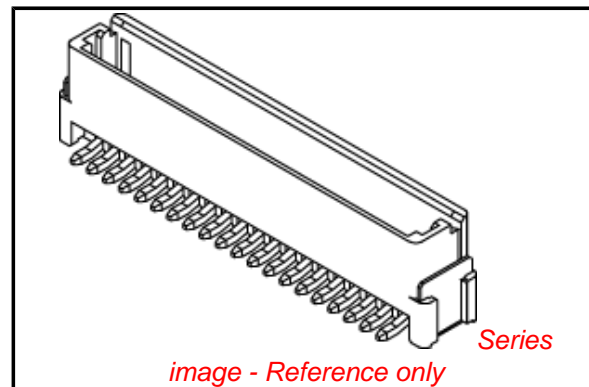
Breakaway	No
Circuits (Loaded)	8
Circuits (maximum)	8
Color - Resin	Natural
Durability (mating cycles max)	30
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	Yes
Mated Height (in)	0.331 In
Mated Height (mm)	8.40 mm
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	1
Orientation	Vertical
PCB Locator	No
PCB Retention	Yes
Packaging Type	Embossed Tape on Reel
Pitch - Mating Interface (in)	0.049 In
Pitch - Mating Interface (mm)	1.25 mm
Plating min: Mating (µin)	40
Plating min: Mating (µm)	1.00
Plating min: Termination (µin)	40
Plating min: Termination (µm)	1.00
Polarized to Mating Part	Yes
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Surface Mount

**Electrical**

Current - Maximum per Contact	1.5A
Voltage - Maximum	100V

**Material Info**

**Reference - Drawing Numbers**



**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](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](#)

Packaging Specification  
Product Specification  
Sales Drawing

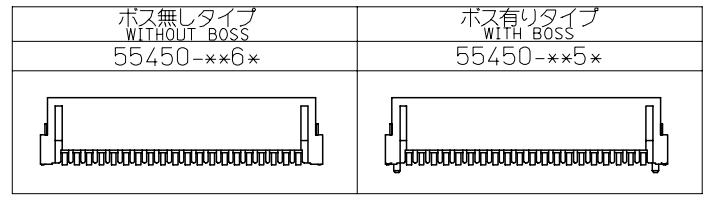
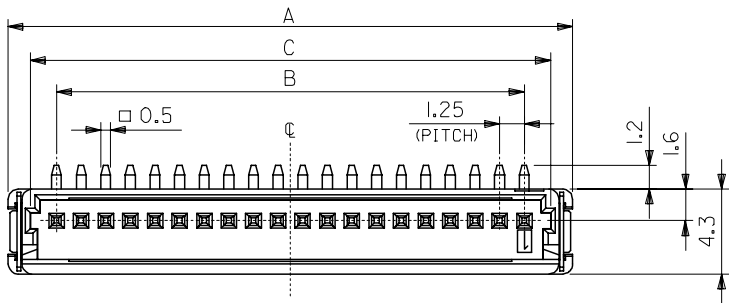
SPK-55450-001  
PS-54596-022, RPS-54596-025, RPS-54596-026  
SD-55450-010, SD-55450-011

This document was generated on 06/07/2010

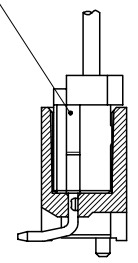
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10 9 8 7 6 5 4 3 2 1

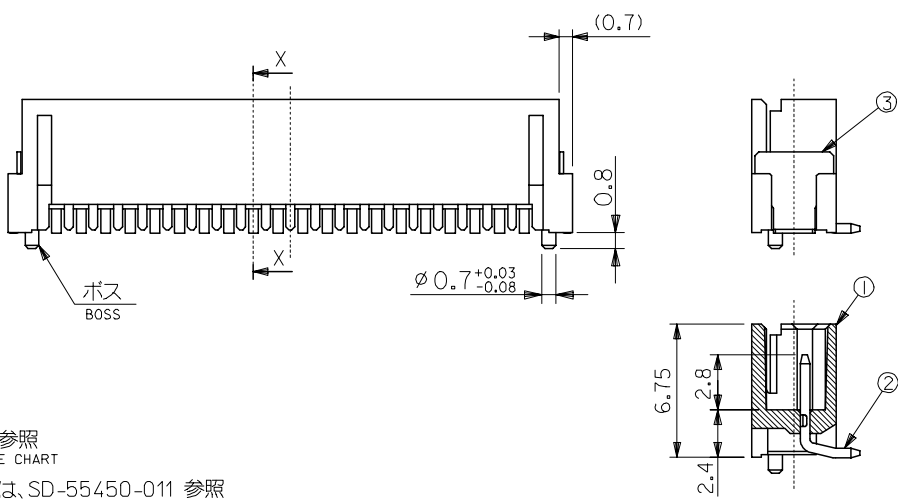
番号 NO.	名称 NAME	原料 MATERIAL	数量 QTY	仕上げ FINISH
①	ウエハー WAFER	ナイロン NYLON	1	UL94V-0
②	ピン PIN	黄銅 BRASS	N	全体錫メッキ PRE-TINNED
③	フィッティングネール FITTING NAIL	黄銅 BRASS	2	錫メッキ TIN PLATING



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

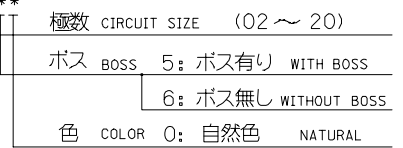
27.05	26.25	26.4	23.75	28.65	20	55450-20**
25.8	25	25.15	22.5	27.4	19	-19**
24.55	23.75	23.9	21.25	26.15	18	-18**
23.3	22.5	22.65	20	24.9	17	-17**
22.05	21.25	21.4	18.75	23.65	16	-16**
20.8	20	20.15	17.5	22.4	15	-15**
19.55	18.75	18.9	16.25	21.15	14	-14**
18.3	17.5	17.65	15	19.9	13	-13**
17.05	16.25	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

1. 原料および仕上げ: 表参照  
MATERIAL AND FINISH: SEE CHART
2. イ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.
3. 端子平坦度は 0.15 MA X.とする。  
COPLANALITY TO BE 0.15 MAX.

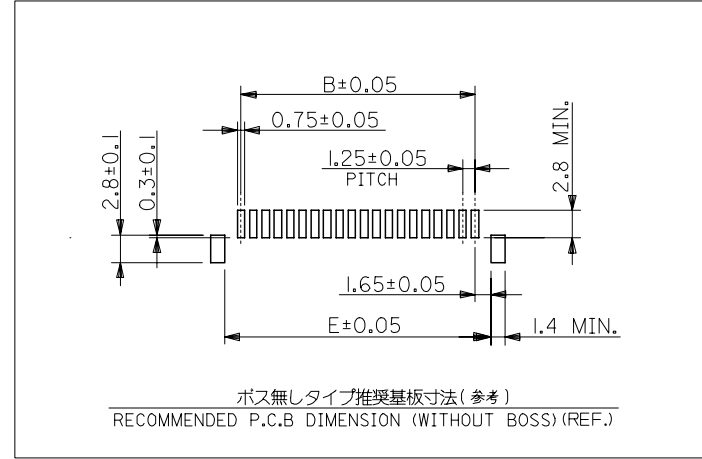
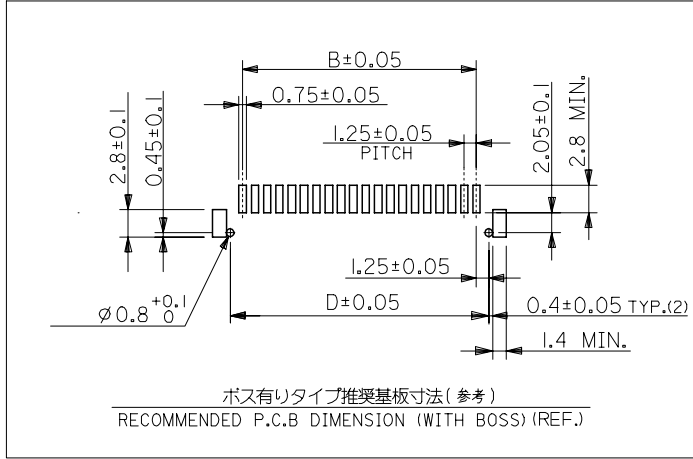
△ 製品番号  
MATERIAL NO.

55450-\*\*\*\*



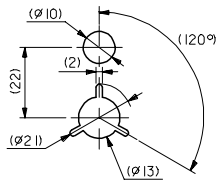
5. 本製品は 55450-\*\*10/\*\*30/\*\*70/\*\*80 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 55450-\*\*10/\*\*30/\*\*70/\*\*80.

REVISED EC NO: J2007-0566 DRWN: OTANI CHKD: NUKITA APPR: NUKITA	DESCRIPTION	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	ANGULAR ±3 °		MATERIAL NO. SEE CHART		MATERIAL NO. SD-55450-010		SHEET NO. 1 OF 2	
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					

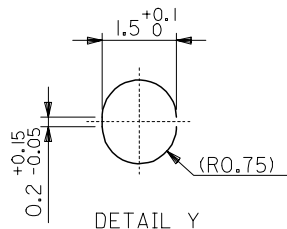


REVISED EC NO: J2007-0566 DRWN: OTANI 2006/09/01 CHK: NUKITA 2006/09/05 APPR: NUKITA 2006/09/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY N.AIDA	DATE '05/02/01	TITLE MINI M12 1-ROW SMT WAFER ASS'Y (TIN) -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 DOCUMENT NO. SD-55450-010 SHEET NO. 2 OF 2			
	ANGULAR	±3 °	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				

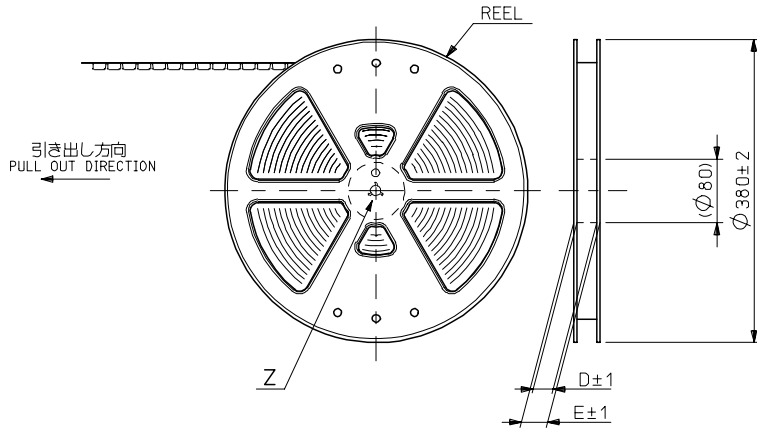
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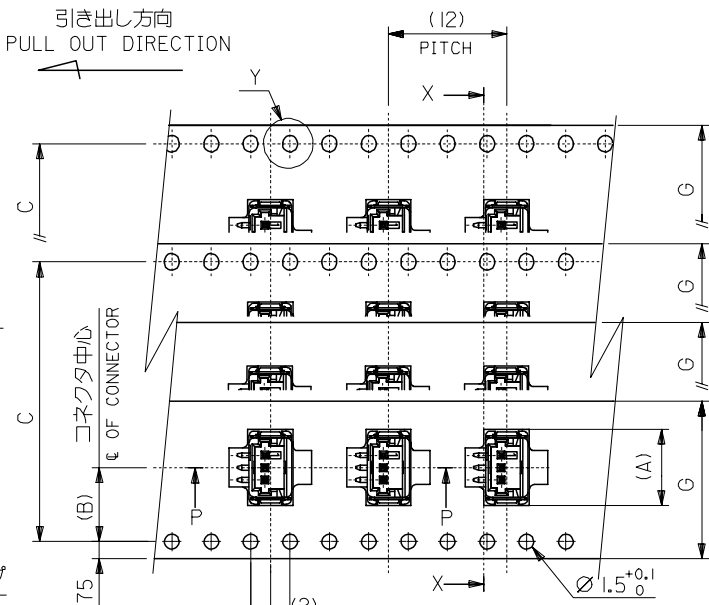
DETAIL Z



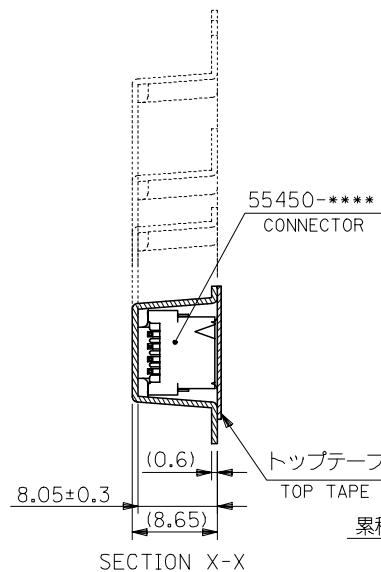
DETAIL Y  
(10:1)



引き出し方向  
PULL OUT DIRECTION



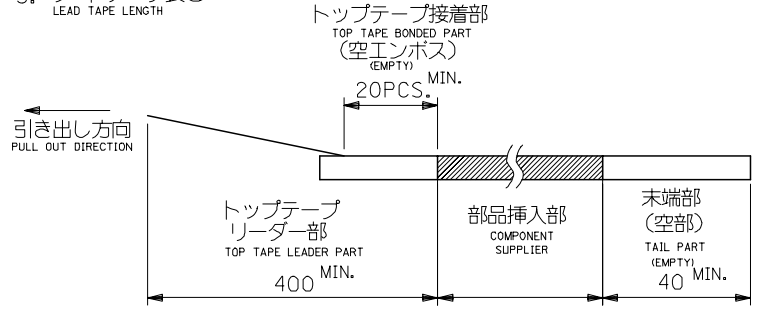
累積ピッチ: 40±0.2 4±0.1  
ACCUMULATIVE PITCH



SECTION X-X

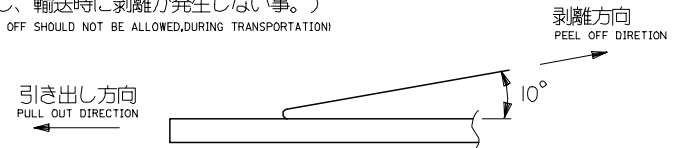
注)  
NOTES

- 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.

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					
		ANGULAR	± --- °	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-55450-011		SHEET NO. 1 OF 3		
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

F

F

E

E

D

D

C

C

B

B

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			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	7.5	15.2		-0960		-0969			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			3	OK					
					6.45	55450-0260	55450-0269		55450-0250	55450-0259		2	OK					

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

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

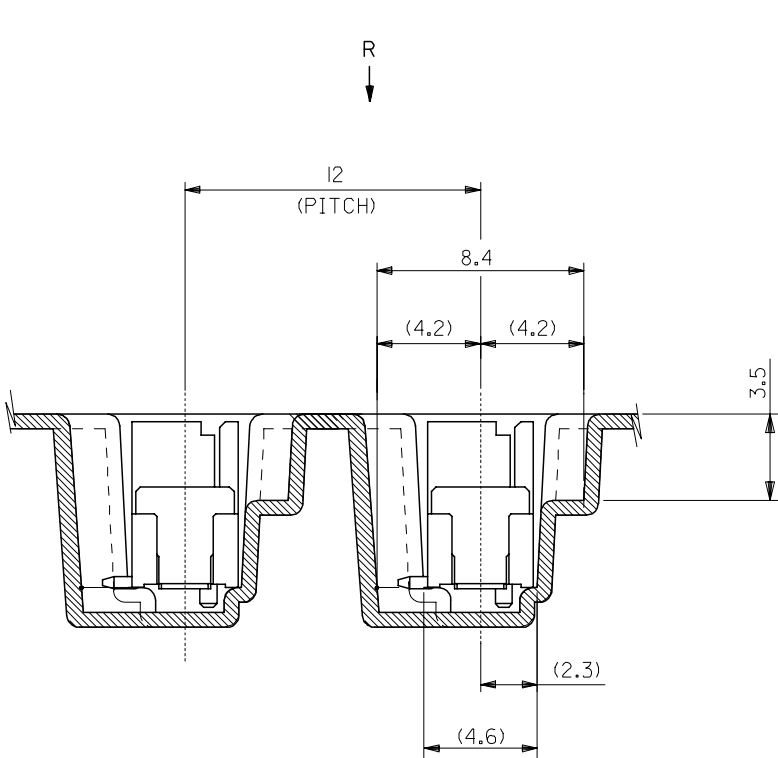
E

D

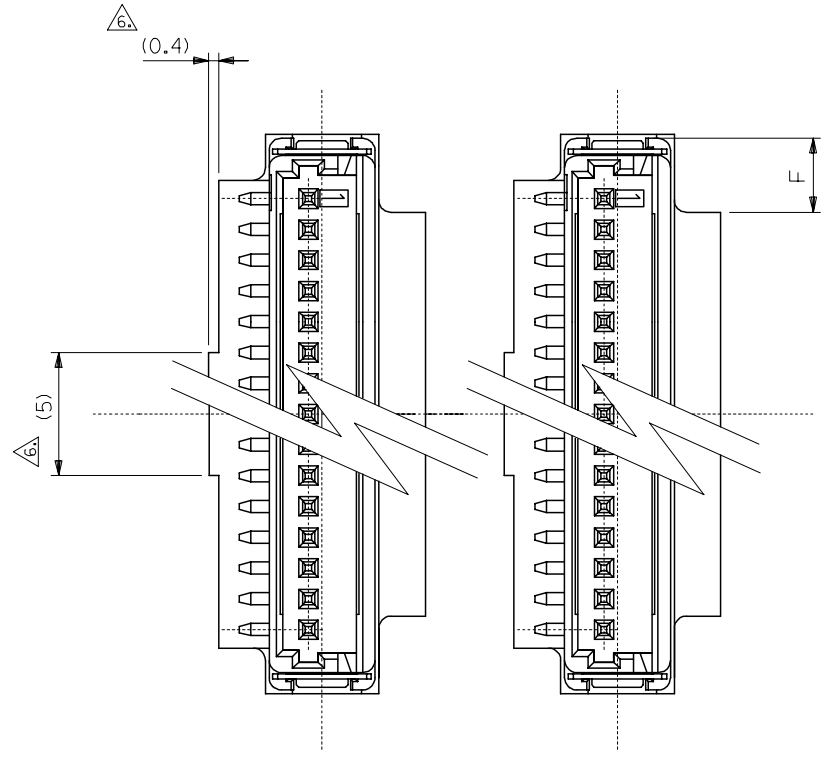
C

B

A



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			
		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	MATERIAL NO. SEE CHART		DOCUMENT NO. SD-55450-011	SHEET NO. 3 OF 3		
		ANGULAR	± --- °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							

9

8

7

6

5

4

3

2