

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

**Part Number:** [0554500369](#)  
**Status:** **Active**  
**Description:** 1.25mm (.049") Pitch Mi II™ System Wire-to-Board Header, SMT, Single Row, Vertical, 3 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
Product Name	Mini Mi II™

**Physical**

Breakaway	No
Circuits (Loaded)	3
Circuits (maximum)	3
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

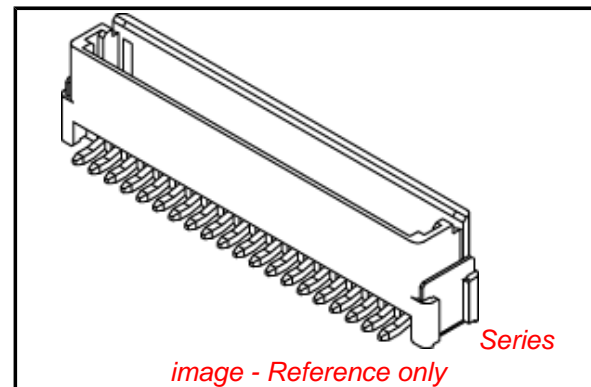
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

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



**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**

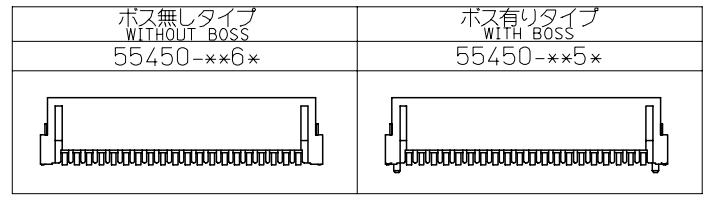
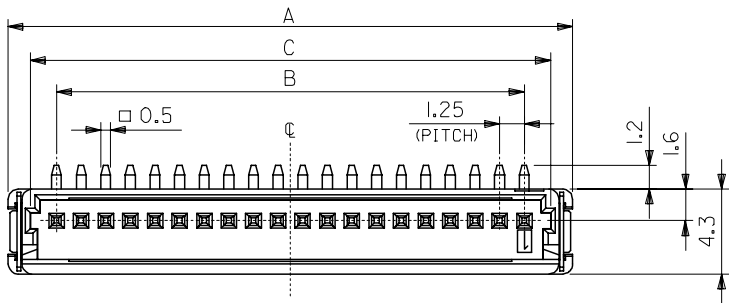
[54596 IDT Receptacle Housing](#)

This document was generated on 04/16/2010

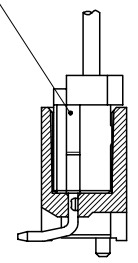
**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

10 9 8 7 6 5 4 3 2 1

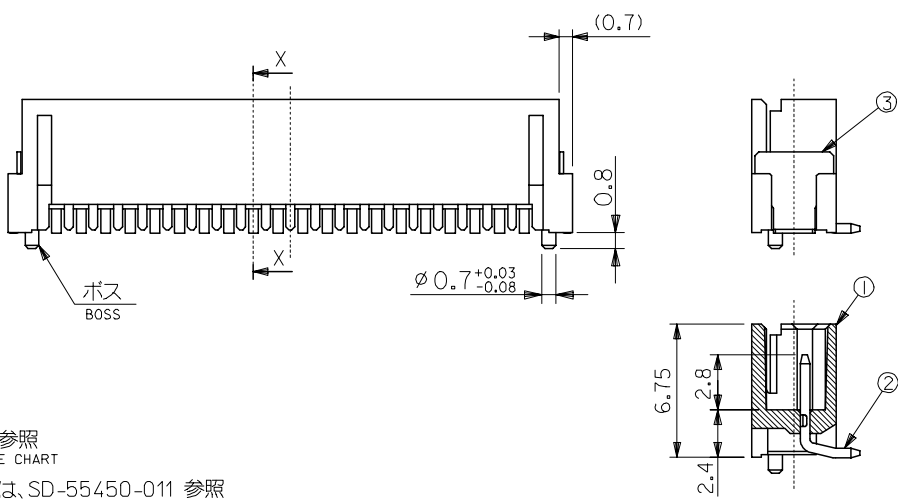
番号 NO.	名称 NAME	原料 MATERIAL	数量 QTY	仕上げ FINISH
①	ウエハー WAFER	ナイロン NYLON	1	UL94V-0
②	ピン PIN	黄銅 BRASS	N	全体錫メッキ PRE-TINNED
③	フィッティングネール FITTING NAIL	黄銅 BRASS	2	錫メッキ TIN PLATING



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

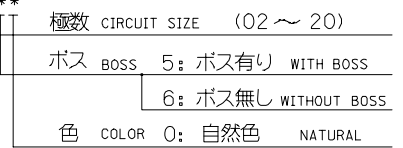
27.05	26.25	26.4	23.75	28.65	20	55450-20**
25.8	25	25.15	22.5	27.4	19	-19**
24.55	23.75	23.9	21.25	26.15	18	-18**
23.3	22.5	22.65	20	24.9	17	-17**
22.05	21.25	21.4	18.75	23.65	16	-16**
20.8	20	20.15	17.5	22.4	15	-15**
19.55	18.75	18.9	16.25	21.15	14	-14**
18.3	17.5	17.65	15	19.9	13	-13**
17.05	16.25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

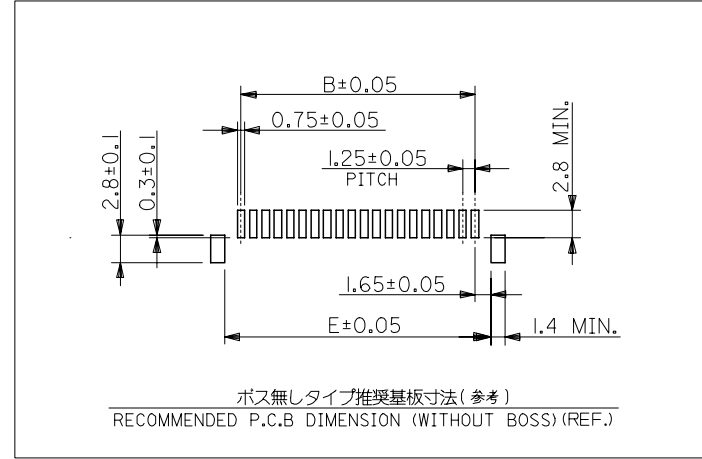
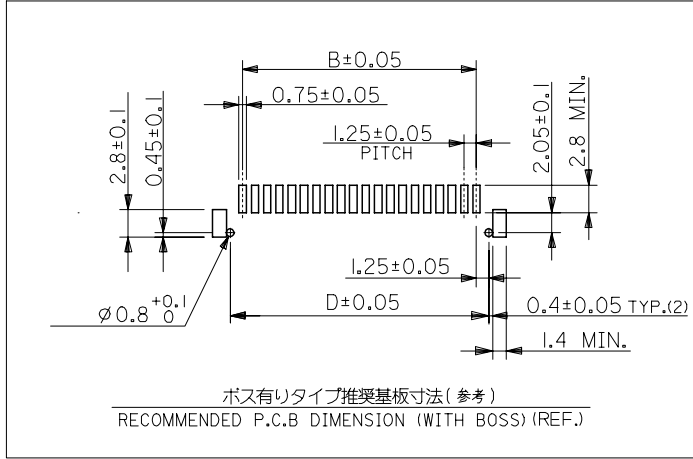
△ 製品番号  
MATERIAL NO.

55450-\*\*\*\*



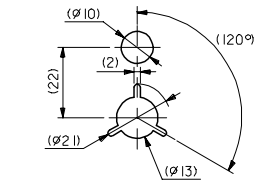
5. 本製品は 55450-\*\*10/\*\*30/\*\*70/\*\*80 の鉛フリー品である。  
THIS PRODUCT IS LEAD FREE OF 55450-\*\*10/\*\*30/\*\*70/\*\*80.

REVISED EC NO: J2007-0566 DRWN: OTANI CHKD: NUKITA APPR: NUKITA	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	MOLEX INCORPORATED		
	30 OVER ±0.3	APPROVED BY N. UKITA	DATE '05/02/01	MATERIAL NO. SEE CHART	DOCUMENT NO. SD-55450-010	SHEET NO. 1 OF 2
	ANGULAR ±3 °	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
A	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					

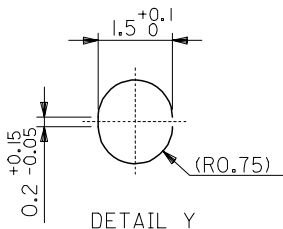


REVISED EC NO: J2007-0566 DRWN: OTANI 2006/09/01 CHK: NUKITA 2006/09/05 APPR: NUKITA 2006/09/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY N.AIDA	DATE '05/02/01	TITLE MINI M12 1-ROW SMT WAFER ASS'Y (TIN)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

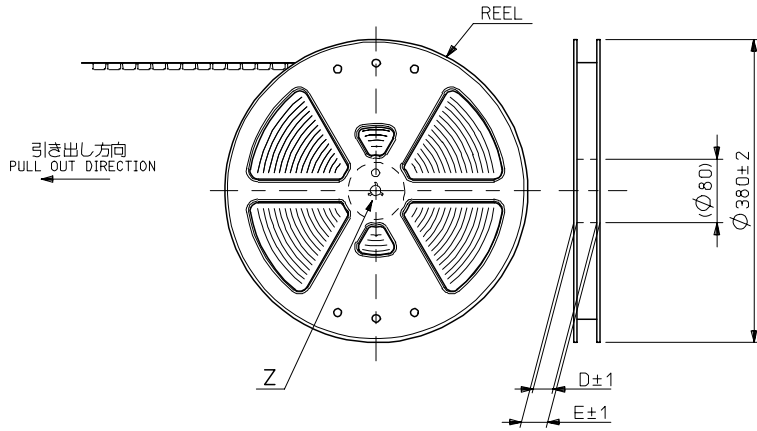
10 9 8 7 6 5 4 3 2 1



DETAIL Z

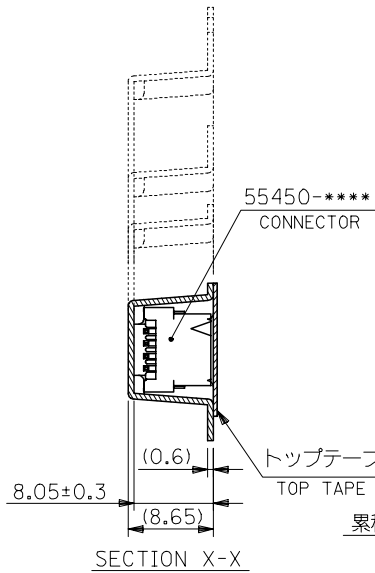


DETAIL Y  
(10:1)

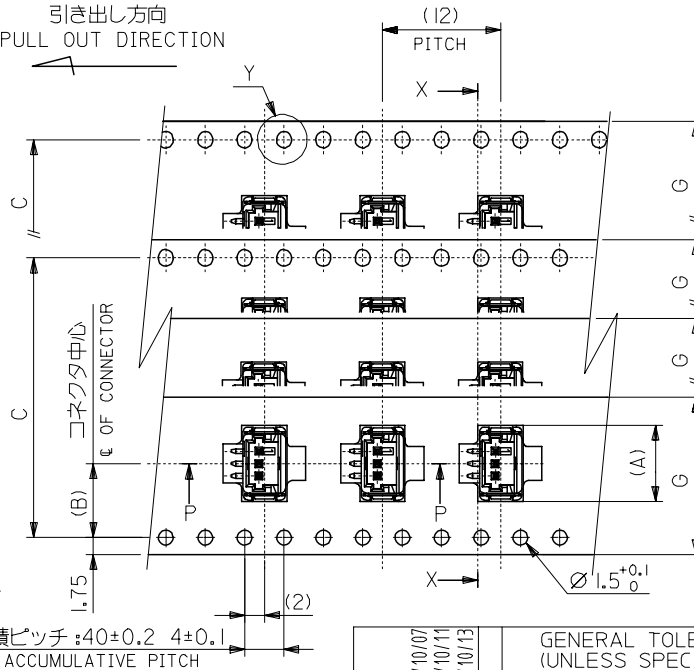


引き出し方向  
PULL OUT DIRECTION

引き出し方向  
PULL OUT DIRECTION



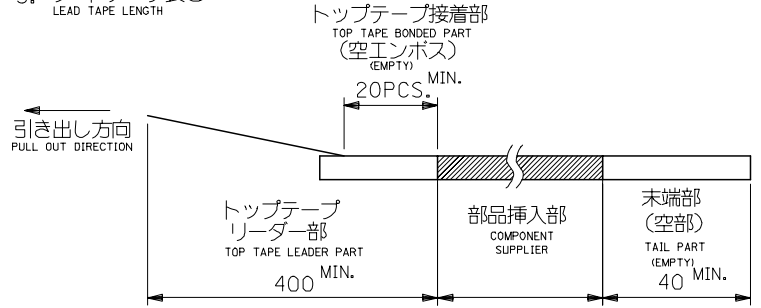
SECTION X-X



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

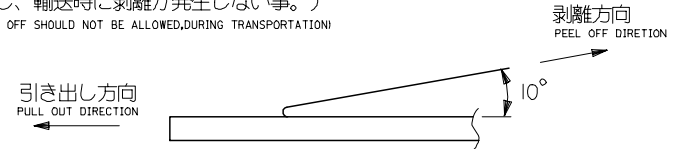
注)  
NOTES

- 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				
		30 OVER	± ---	APPROVED BY N. UKITA	DATE '05/02/01	MOLEX INCORPORATED		MATERIAL NO. SEE CHART	DOCUMENT NO. SD-55450-011
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

E

D

C

B

A

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
						20.2		-1360			-1369			-1350		-1359	13	OK
						18.95		-1260			-1269			-1250		-1259	12	OK
						17.7		-1160			-1169			-1150		-1159	11	OK
32	2	37.4	33.4	28.4	14.2	16.45		-1060		-1069		-1050		-1059	10	OK		
						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		
24	2	29.4	25.4	11.5	7.5	8.95		-0460		-0469		-0450		-0459	4	NO		
						7.7		-0360		-0369		-0350		-0359	3	OK		
						6.45	55450-0260	55450-0269		55450-0250	55450-0259				2	OK		
						16												
G	キャリアテープ巾 TAPE WIDTH	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			

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 ---	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.		DOCUMENT NO. SD-55450-011		SHEET NO. 2 OF 3
	ANGULAR	± --- °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART				

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

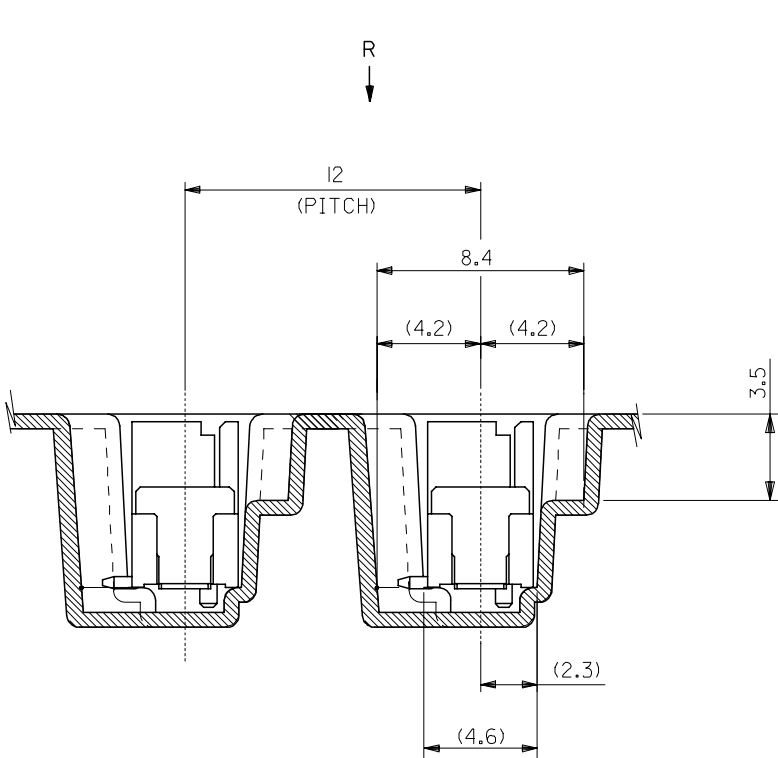
E

D

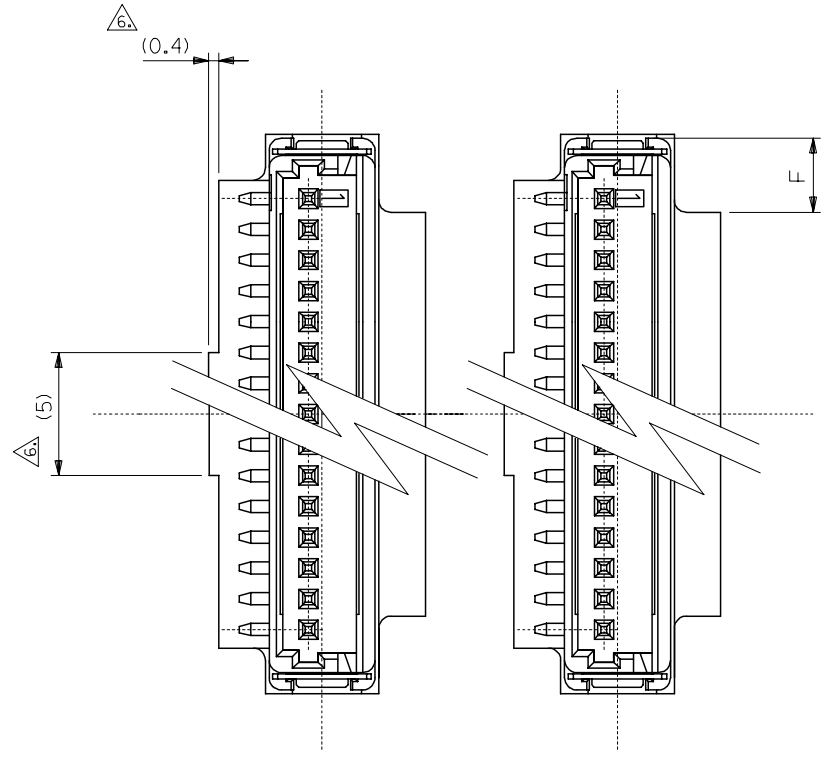
C

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 EMBOSSED TAPE PACKAGE FOR 55450-**** -LEAD FREE-				
		10 OVER 30 UNDER	± ---	CHECKED BY K. TOJO	DATE '05/02/01					
		30 OVER	± ---	APPROVED BY N. UKITA	DATE '05/02/01	MOLEX INCORPORATED DOCUMENT NO. SD-55450-011 SHEET NO. 3 OF 3				
ANGULAR	± --- °	MATERIAL NO. SEE CHART								
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