

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

**Part Number:** **0541020304**  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch SlimStack™ Receptacle, Surface Mount, Dual Row, Vertical, 2.50mm (.098") Stacking Height, Gold Plating with Nickel Barrier, 30 Circuits

**Documents:**

[3D Model](#)  
[Drawing \(PDF\)](#)  
[Product Specification PS-54102-010 \(PDF\)](#)  
[Product Specification PS-54102-011 \(PDF\)](#)  
[RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family PCB Receptacles  
 Series [54102](#)  
 Application Board-to-Board  
 Product Name SlimStack™

**Physical**

Circuits (Loaded) 30  
 Color - Resin Black  
 Durability (mating cycles max) 30  
 Glow-Wire Compliant No  
 Lock to Mating Part Yes  
 Mated Height (in) 0.098 In  
 Mated Height (mm) 2.50 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Gold  
 Number of Rows 2  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention None  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.020 In  
 Pitch - Mating Interface (mm) 0.50 mm  
 Polarized to Mating Part No  
 Polarized to PCB No  
 Stackable No  
 Temperature Range - Operating -40°C to +85°C  
 Termination Interface: Style Surface Mount

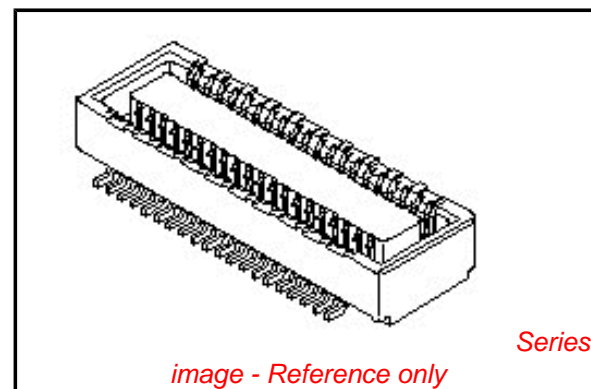
**Electrical**

Current - Maximum per Contact 0.5A  
 Voltage - Maximum 50V

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-54102-010, PS-54102-011, RPS-54102-013, RPS-54102-015, RPS-54102-017  
 Sales Drawing SD-54102-006, SD-54102-007



**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](#)

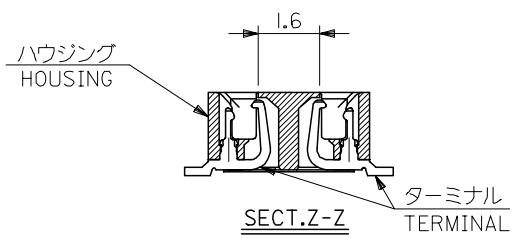
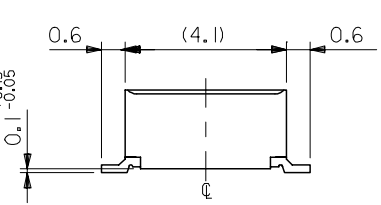
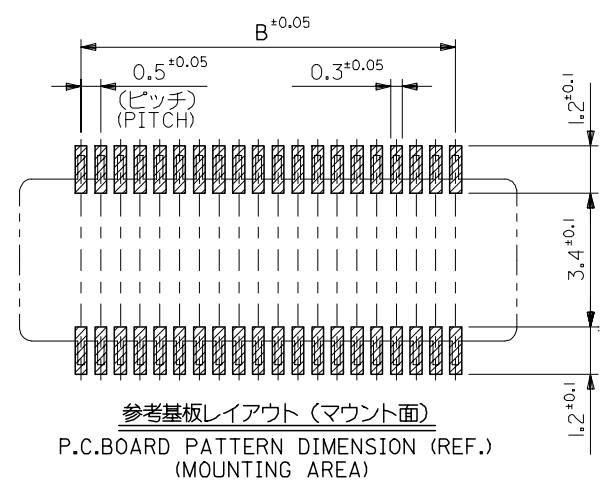
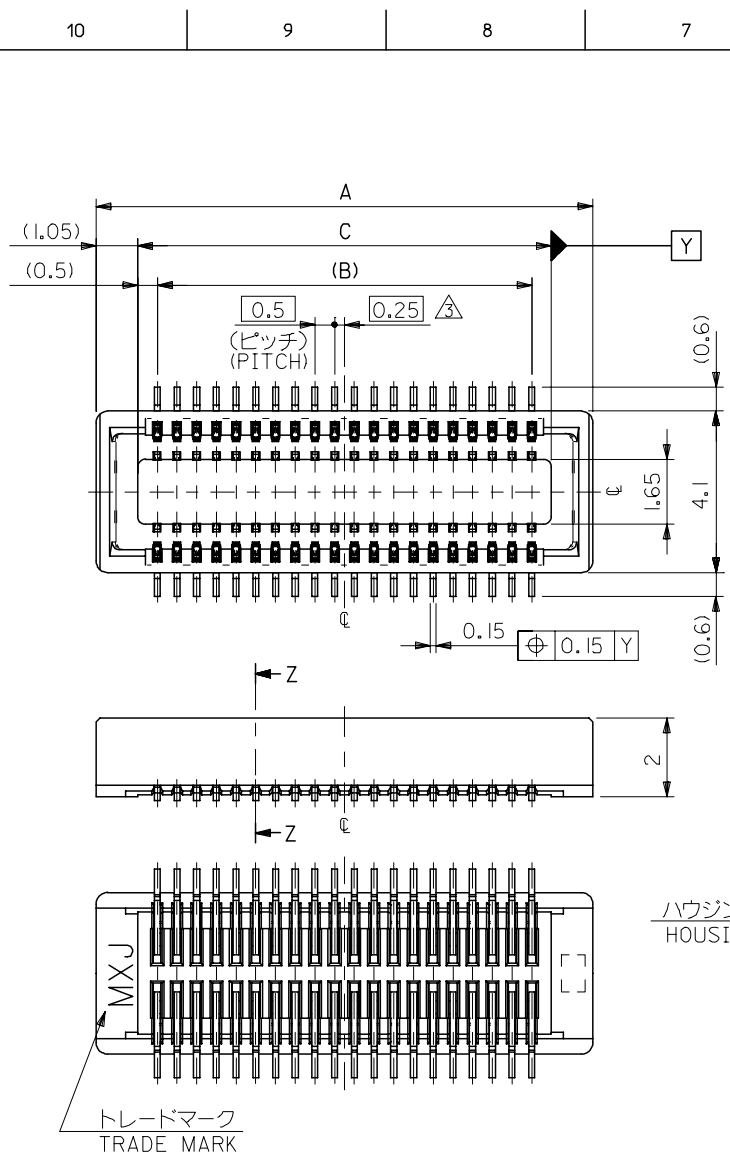
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[54102Series](#)

**Mates With**

[500334](#) PCB Header, [53885](#) PCB Header

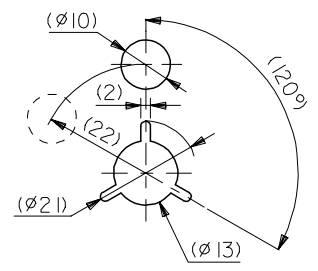
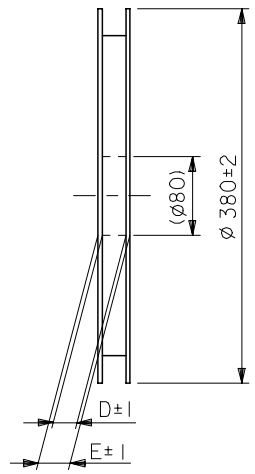
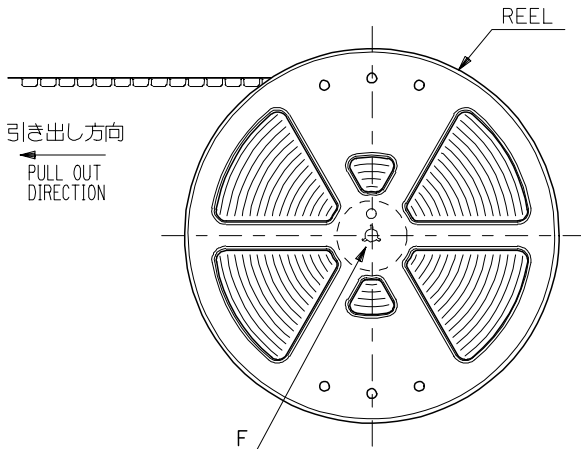


**注記 NOTES:**

1. 使用材料 MATERIAL  
ハウジング: ポリフタルアミド (P.P.A), ガラス充填, UL94V-0, 色: 黒  
HOUSING: POLYPHTHALAMIDO (PPA), GLASS FILLED UL94V-0, COLOR: BLACK  
ターミナル: リン青銅 (t=0.15)  
TERMINAL: PHOSPHOR BRONZE (t=0.15)
2. メッキ仕様 PLATING  
金メッキ 0.25 マイクロメートル以上 (コンタクト部)  
GOLD(AU) 0.25 MICROMETER MINIMUM (CONTACT AREA)  
金メッキ 0.05 マイクロメートル以上 (テール部)  
GOLD(AU) 0.05 MICROMETER MINIMUM (TAIL AREA)  
下地メッキ: ニッケルメッキ 1.5 マイクロメートル以上  
UNDER PLATING: NICKEL 1.5 MICROMETER MINIMUM  
\*コンタクト部とテール部はニッケルメッキによって分断されている金メッキです。  
DIVIDE INTO PARTS THE GOLD PLATING OF THE CONTACT PART AND THE TAIL PART BY THE NICKEL PLATING.
- △ (全極数/2) = 偶数の場合に適用。  
APPLY FOR (CIRCUIT/2) = EVEN.
- 4 嵌合相手: 53885 / 500334 シリーズ  
MATE WITH: 53885 / 500334 SERIES.
- 5 テール平坦度は、0.1MAX.  
TAIL COPLANARITY TO BE 0.1 MAXIMUM.

18.0	17.0	20.1	54102-0703	70
15.5	14.5	17.6	-0603	60
13.0	12.0	15.1	4 -0503	50
10.5	9.5	12.6	-0403	40
8.0	7.0	10.1	7 -0303	30
5.5	4.5	7.6	-0203	20
4.5	3.5	6.6	54102-0163	16
C	B	A	MATERIAL No.	極数 CIRCUIT
			MODEL No.	54102-***3

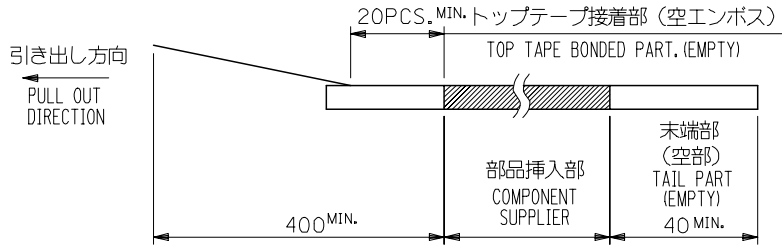
REVISED EC No: J2005-1175 DRAWN: MIMEDA 2004/10/29 CHKD: KTOYODA 2004/10/29 APPR: NUKITA 2004/11/01	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY Y. SAKIYA	DATE 2004/05/06	TITLE 0.5 B-TO-B CONN REC HSG ASSY(HGT=2.5) [NI BARRIER]-LEAD FREE-	
	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE 2004/05/06	MOLEX INCORPORATED	
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/05/06	DOCUMENT NO. SD-54102-006	SHEET NO. 1 OF 1
	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			



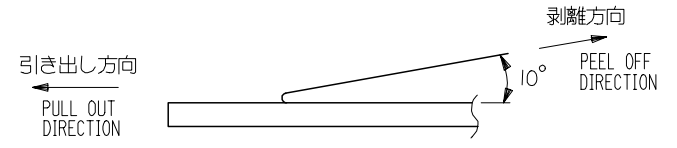
DETAIL F

NOTES

- 製品詳細寸法については図面 SD-54102-006 を参照下さい。  
RE DETAILED DIMENSION, SEE SD-54102-006.
- 梱包数量：3000個/リール  
NUMBER OF CONNECTORS : 3000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH



- トップテープの剥離強度：0.1~1.3N {10~130gf} (剥離方向は下図参照)  
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)  
PEELING OFF FORCE OF TOP TAPE : 0.1~1.3N {10~130gf}  
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.  
PEEL OFF SHOULD NOT BE ALLOWED , DURING TRANSPORTATION.



- 材料 (MATERIAL)  
キャリアテープ (CARRIER TAPE) : ポリプロピレン (POLYPROPYLENE)  
トップテープ (TOPTAPE) : PET, PE, PEF  
リール (REEL) : ポリスチレン (P.S) <リサイクル材を含む>  
POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>

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	10 UNDER	±0.2	DRAWN BY Y. SAKIYA	DATE 2004/05/06	TITLE EMBSTP PKG FOR 0.5 B/B REC HSG ASSY (H=2.5) [NI BARRIER]-LEAD FREE-			
	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE 2004/05/06	MOLEX INCORPORATED			
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/05/06	DOCUMENT NO. SD-54102-007		SHEET NO. 1 OF 3	
	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						

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

E

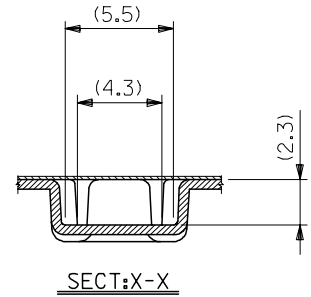
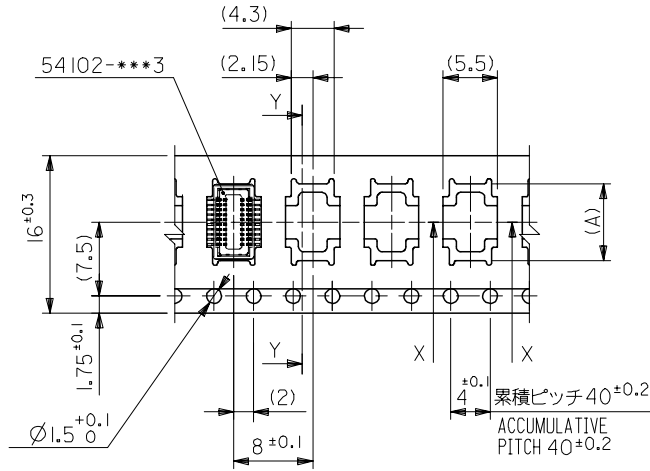
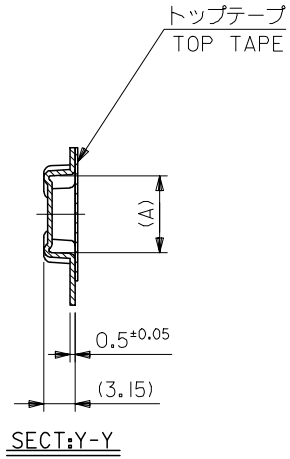
D

C

B

A

引き出し方向  
PULL OUT DIRECTION



16mm幅キャリアテープ  
16mm WIDTH CARRIER TAPE

16	21.4	17.4	7.8	54102-0204	20
			6.8	54102-0164	16
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(A)	MATERIAL NO.	極数 CIRCUITS

MODEL NO. 54102-\*\*\*4

REVISED EC NO: J2005-1175 2004/10/29 DRAWN:MIMEDA 2004/10/29 CHKD:KTOYODA 2004/11/01 APPR:NUKITA	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
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	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE 2004/05/06	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/05/06	DOCUMENT NO. SD-54102-007		
	ANGULAR	±3 °	MATERIAL NO.		SHEET NO. 2 OF 3		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		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

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

E

D

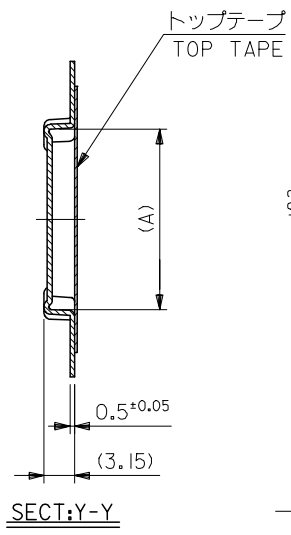
C

B

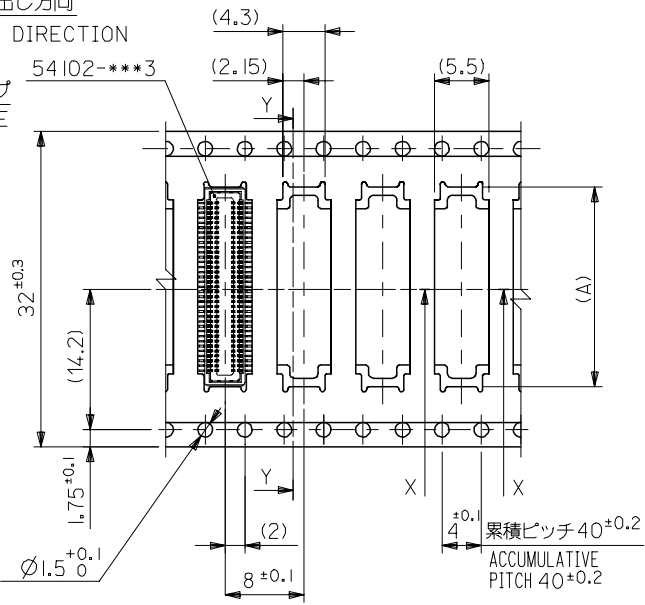
A

引き出し方向  
PULL OUT DIRECTION

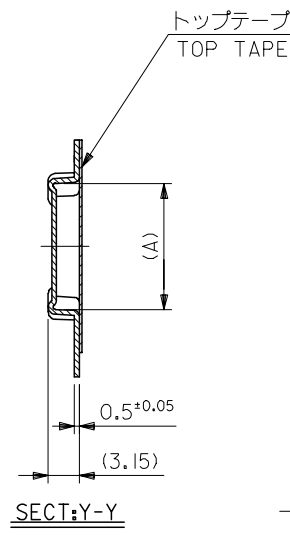
引き出し方向  
PULL OUT DIRECTION



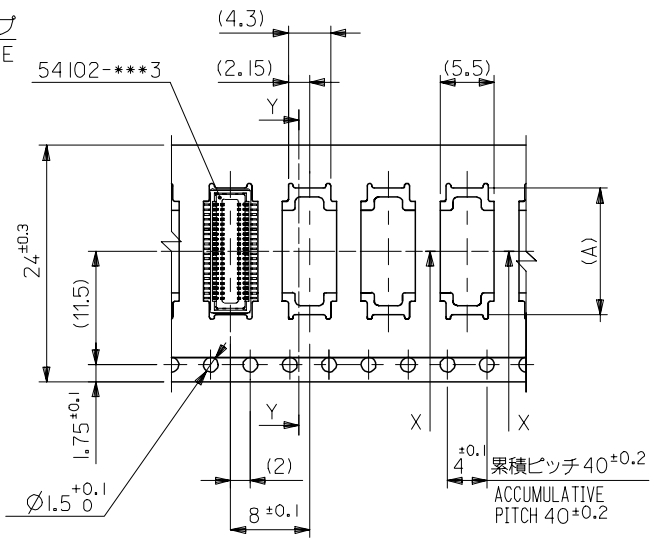
SECT:Y-Y



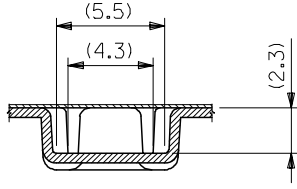
32mm幅キャリアテープ  
32mm WIDTH CARRIER TAPE



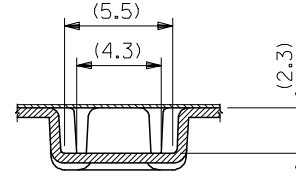
SECT:Y-Y



24mm幅キャリアテープ  
24mm WIDTH CARRIER TAPE



SECT:X-X



SECT:X-X

32	37.4	33.4	20.3	54102-0704	70
			17.8	54102-0604	60
			15.3	54102-0504	50
24	29.4	25.4	12.8	54102-0404	40
			10.3	54102-0304	30
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(A)	MATERIAL NO.	極数 CIRCUITS

REVISED EC NO: J2005-1175 DRAWN: MIMEDA CHKD: KTOYOYDA APPR: NUKITA 2004/10/29 2004/10/29 2004/11/01	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 54102-***4
	10 UNDER	±0.2	DRAWN BY Y. SAKIYA	DATE 2004/05/06	TITLE EMBSTP PKG FOR 0.5 B/B REC HSG ASSY (H=2.5) [NI BARRIER]-LEAD FREE-		
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	30 OVER	±0.3	APPROVED BY M. SASAO	DATE 2004/05/06	DOCUMENT NO. SD-54102-007		
	ANGULAR	±3 °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SHEET NO. 3 OF 3		