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**Part Number:** [0541020504](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch SlimStack™ Receptacle, Surface Mount, Dual Row, Vertical, 2.50mm (.098") Stacking Height, Gold Plating with Nickel Barrier, 50 Circuits

**Documents:**

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

**General**

Product Family	PCB Receptacles
Series	<a href="#">54102</a>
Application	Board-to-Board
Product Name	SlimStack™

**Physical**

Circuits (Loaded)	50
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

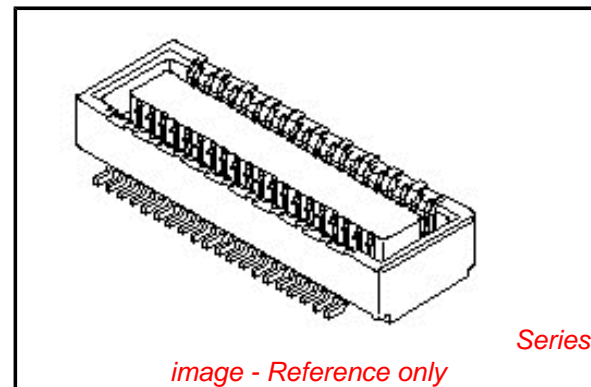
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Product Specification	PS-54102-011, RPS-54102-013, RPS-54102-015
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](#)

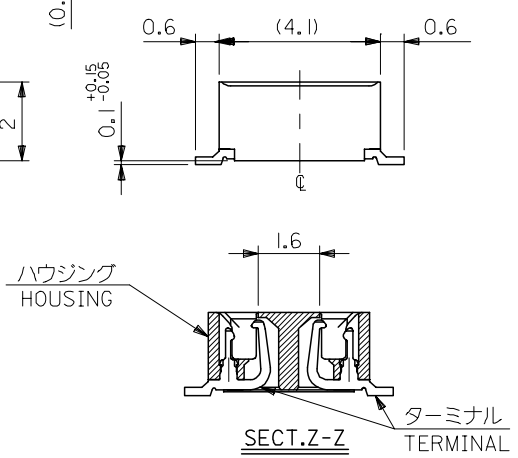
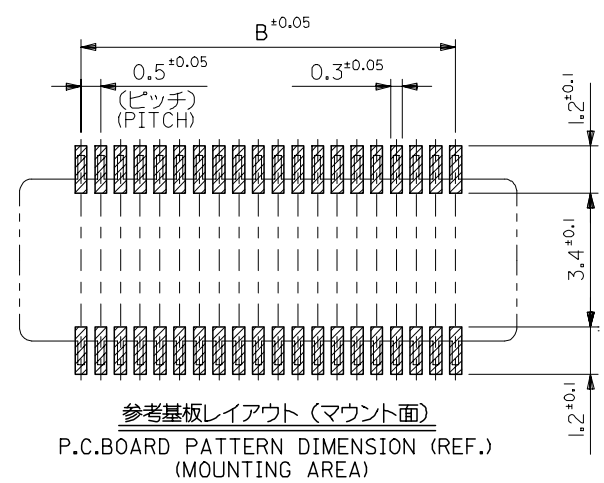
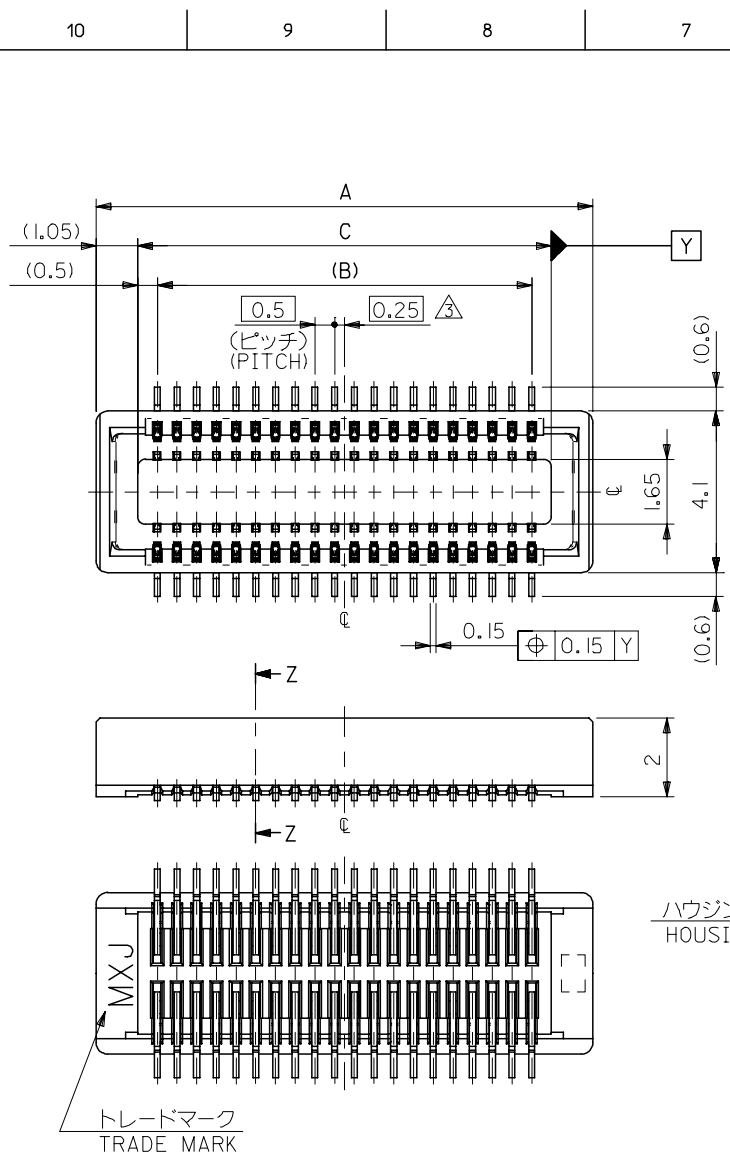
Please visit the [Contact Us](#) section for any  
 non-product compliance questions.

**Search Parts in this Series**

[54102Series](#)

**Mates With**

[53885 PCB Header](#)

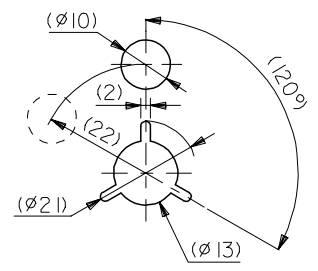
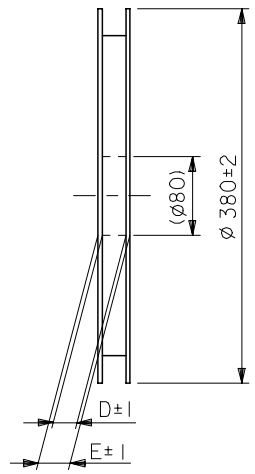
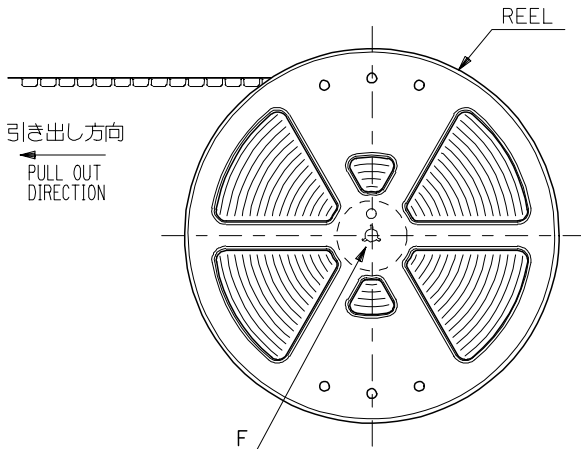


**注記 NOTES:**

1. 使用材料 MATERIAL  
ハウジング: ポリフタルアミド (PPA), ガラス充填, UL94V-0, 色: 黒  
HOUSING: POLYPHTHALAMIDE (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

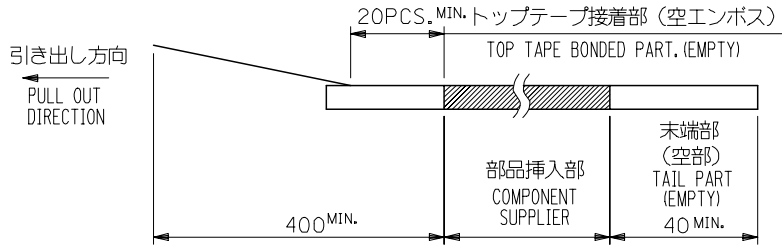
REVISED EC No: J2005-1175 DRAWN: MIMEDA 2004/10/29 CHKD: KTOYODA 2004/10/29 APPR: NUKITA 2004/11/01	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
			MM ONLY	---	METRIC	
	10 UNDER	±0.2	DRAWN BY	DATE	TITLE	
	10 OVER 30 UNDER	±0.25	Y. SAKIYA	2004/05/06	0.5 B-TO-B CONN REC HSG ASSY(HGT=2.5) [NI BARRIER]-LEAD FREE-	
	30 OVER	±0.3	CHECKED BY	DATE	MOLEX INCORPORATED	
ANGULAR	±3 °	M. SASAO	2004/05/06	APPROVED BY		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		M. SASAO	2004/05/06	DATE		
		MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
		SEE CHART		SD-54102-006	1 OF 1	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



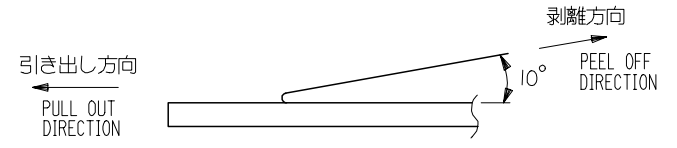
DETAIL F

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				
A	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

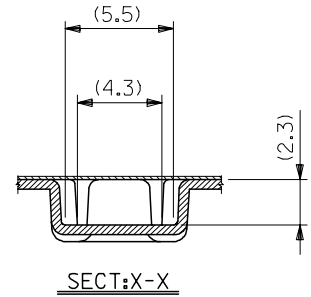
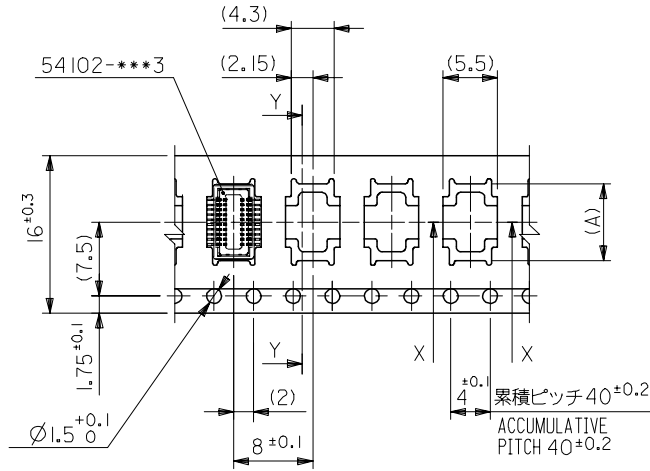
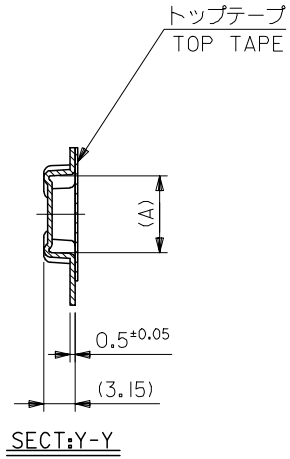
D

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
	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		
	ANGULAR	±3 °	MATERIAL NO. SEE CHART		SHEET NO. 2 OF 3		
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					

10 9 8 7 6 5 4 3 2 1

F

E

D

C

B

A

F

E

D

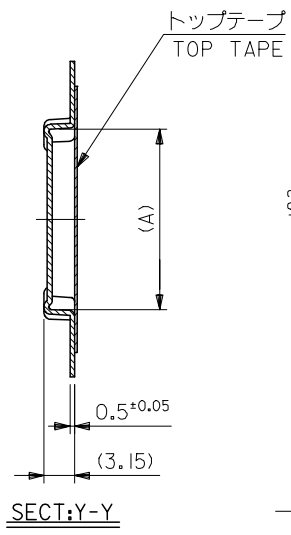
C

B

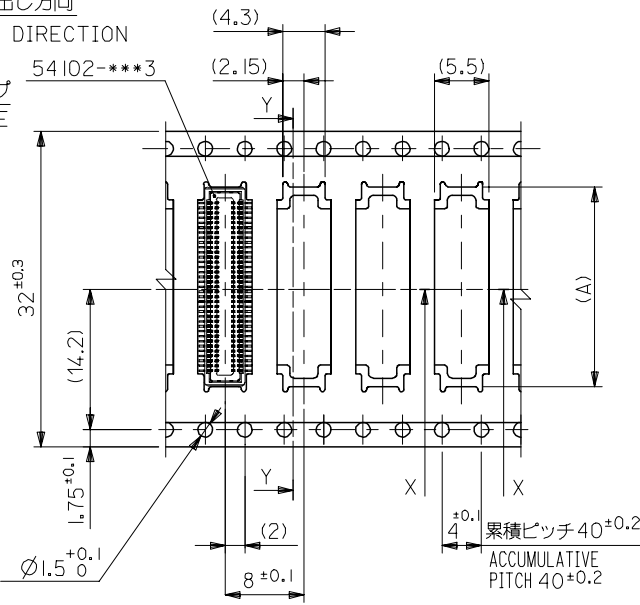
A

引き出し方向  
PULL OUT DIRECTION

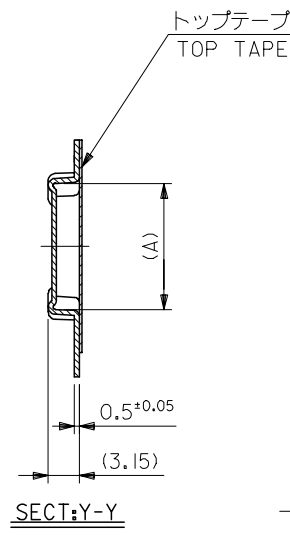
引き出し方向  
PULL OUT DIRECTION



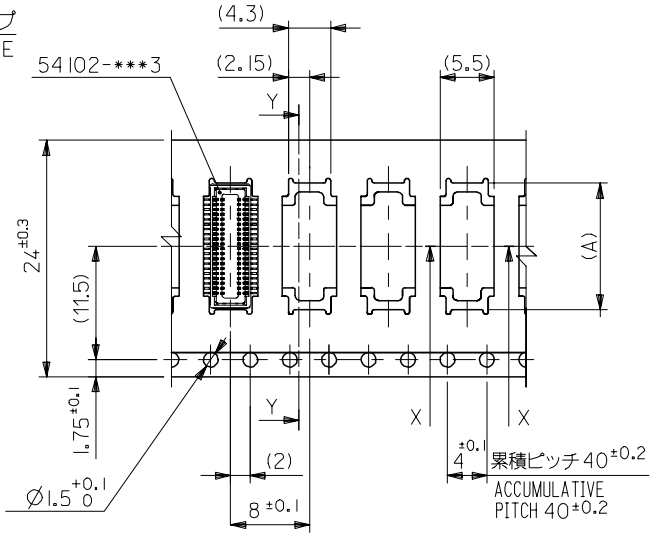
SECT:Y-Y



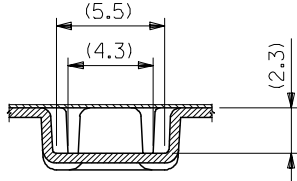
32mm幅キャリアテープ  
32mm WIDTH CARRIER TAPE



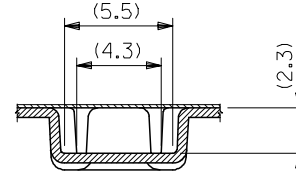
SECT:Y-Y



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-		
	10 OVER 30 UNDER	±0.25	CHECKED BY M. SASAO	DATE 2004/05/06	MATERIAL NO. SEE CHART		
	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		