

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

**Part Number:** **0541020164**  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch SlimStack™ Receptacle, Surface Mount, Dual Row, Vertical, 2.50mm (.098") Stacking Height, Gold Plating with Nickel Barrier, 16 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) 16  
 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

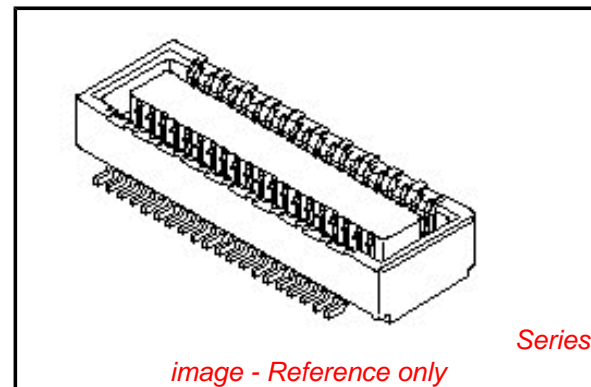
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-54102-010, PS-54102-011, RPS-54102-008, RPS-54102-012, RPS-54102-014, 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**

**China RoHS**



**Not Reviewed**  
**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](#)

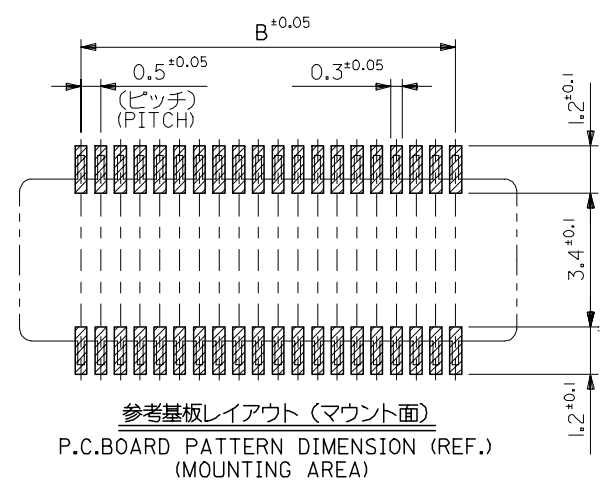
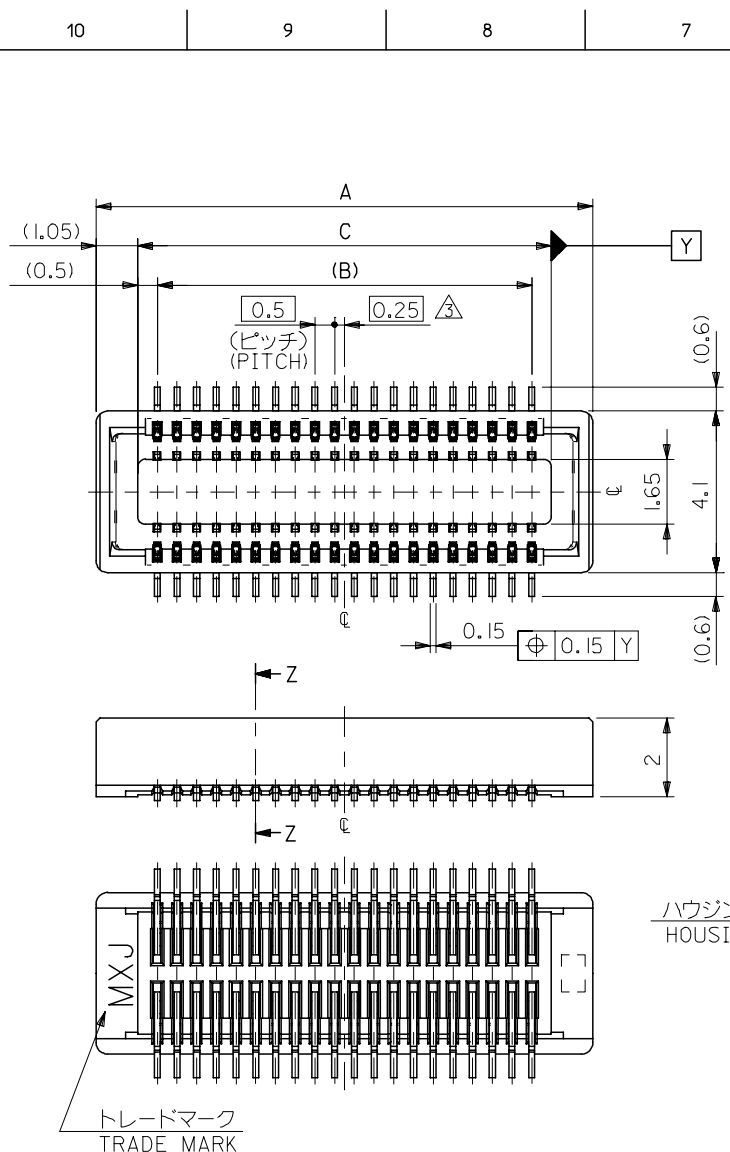
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[54102Series](#)

**Mates With**

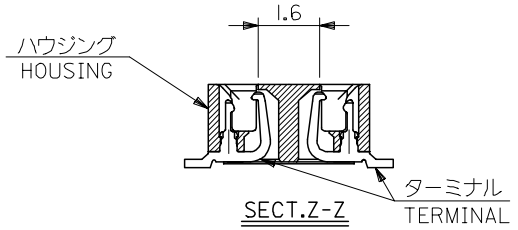
[500334 PCB Header](#)



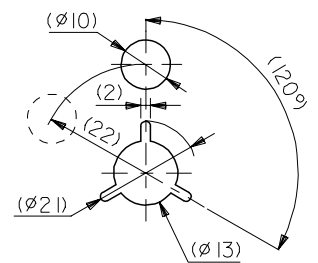
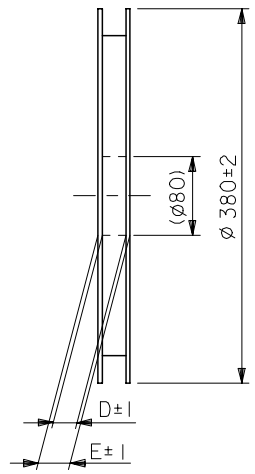
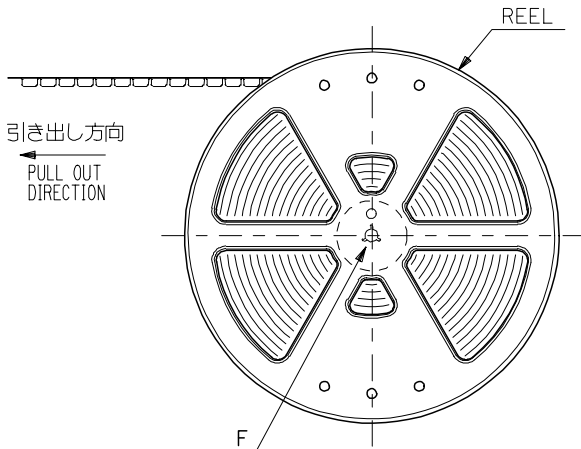
**注記 NOTES:**

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



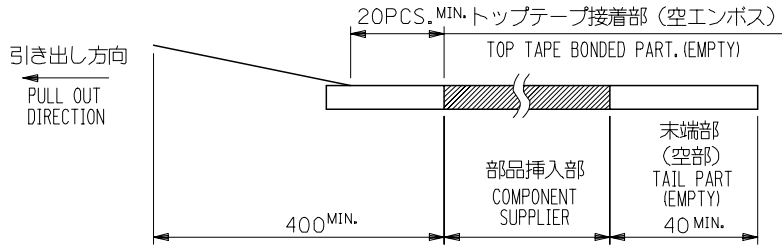
REVISED EC No: J2005-1175 DRAWN: MIMEDA 2004/10/29 CHK'D: KTOYODA 2004/10/29 APPR: NUKITA 2004/11/01	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY Y. SAKIYA	DATE 2004/05/06	TITLE 0.5 B-TO-B CONN REC HSG ASSY(HGT=2.5) [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		
	ANGULAR	±3 °	MATERIAL NO.	SEE CHART	SHEET NO. 1 OF 1		
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			



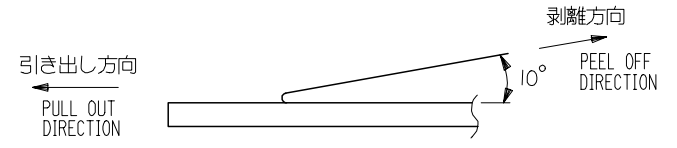
DETAIL F

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>

REVISED EC NO: J2005-1175 DRAWN/MEDIA 2004/10/29 CHKD:KTOYODA 2004/10/29 APPR:NUKITA 2004/11/01 REV A	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	SHEET NO. 1 OF 3	
	ANGULAR ±3 °		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					

10 9 8 7 6 5 4 3 2 1

F

F

E

E

D

D

C

C

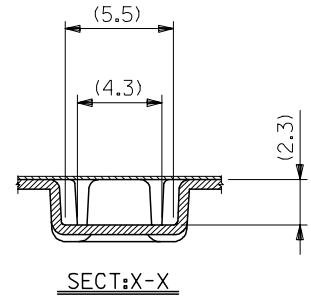
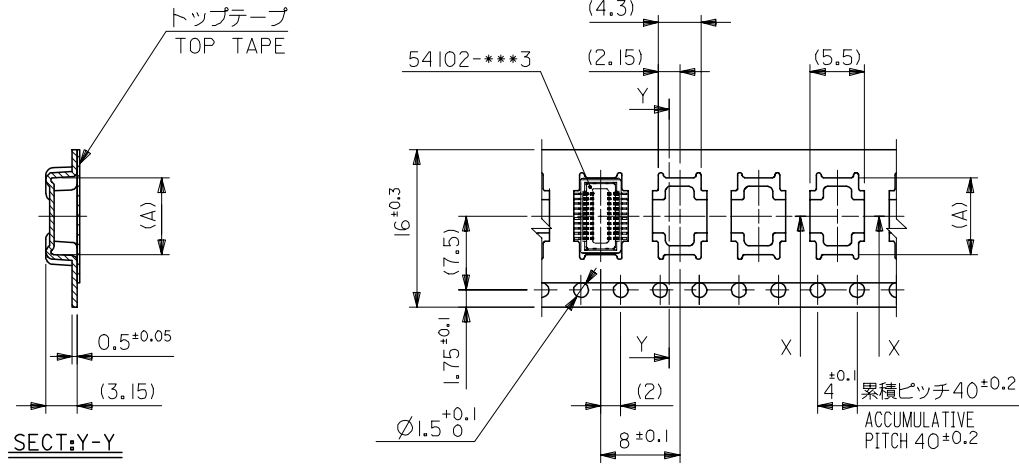
B

B

A

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					

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

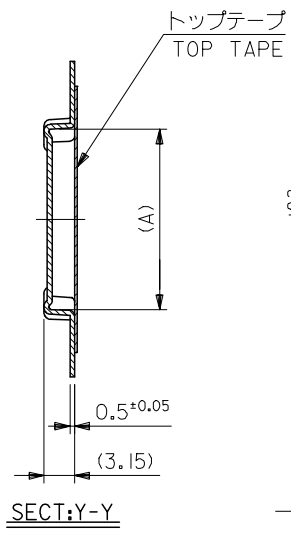
C

B

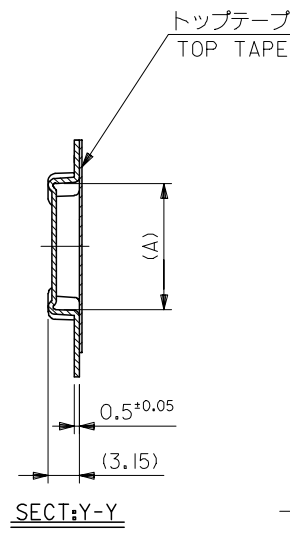
A

引き出し方向  
PULL OUT DIRECTION

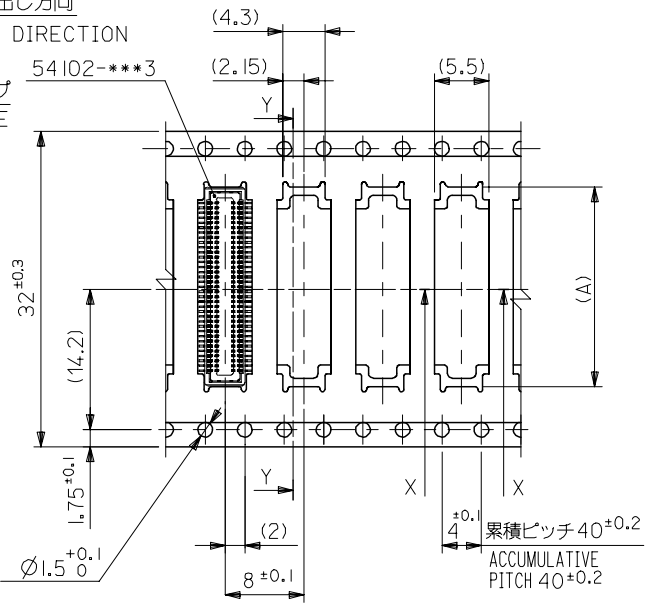
引き出し方向  
PULL OUT DIRECTION



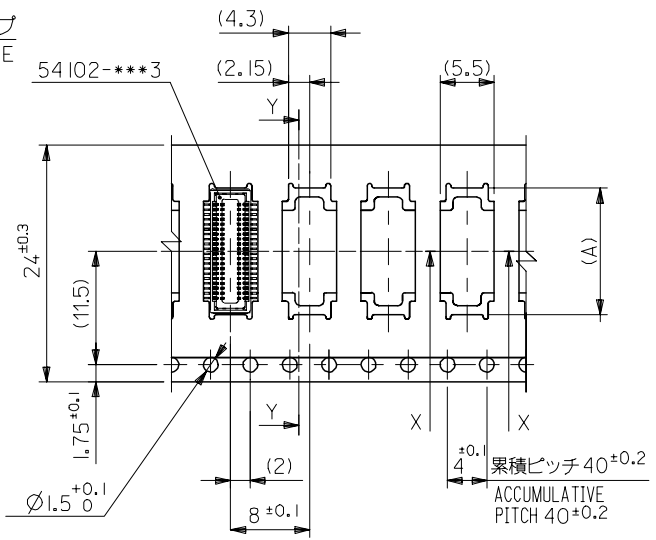
SECT:Y-Y



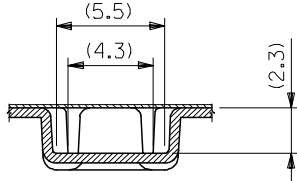
SECT:Y-Y



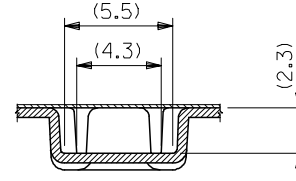
32mm幅キャリアテープ  
32mm WIDTH CARRIER TAPE



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		