

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: **0541020204**
Status: **Active**
Description: 0.50mm (.020") Pitch SlimStack™ Receptacle, Surface Mount, Dual Row, Vertical, 2.50mm (.098") Stacking Height, Gold Plating with Nickel Barrier, 20 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) 20
 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

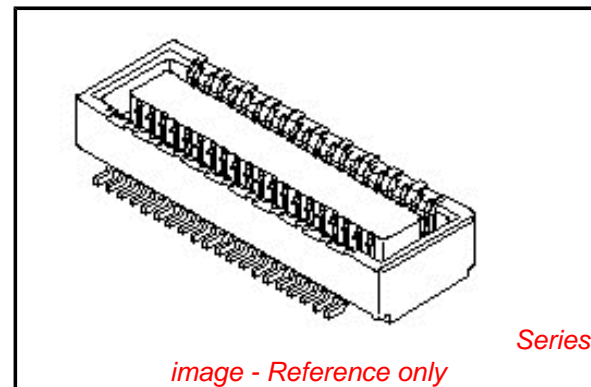
Electrical

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

Material Info

Reference - Drawing Numbers

Product Specification PS-54102-010, PS-54102-011, RPS-54102-012, 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
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

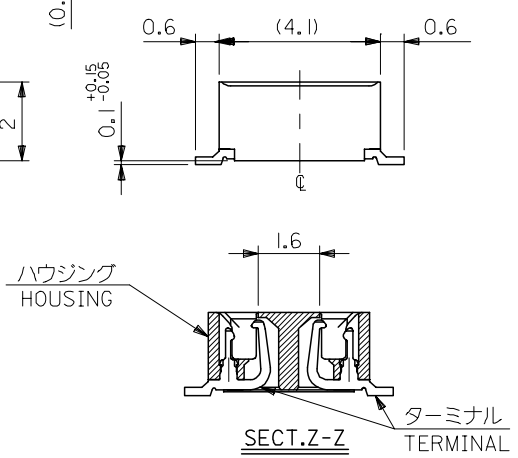
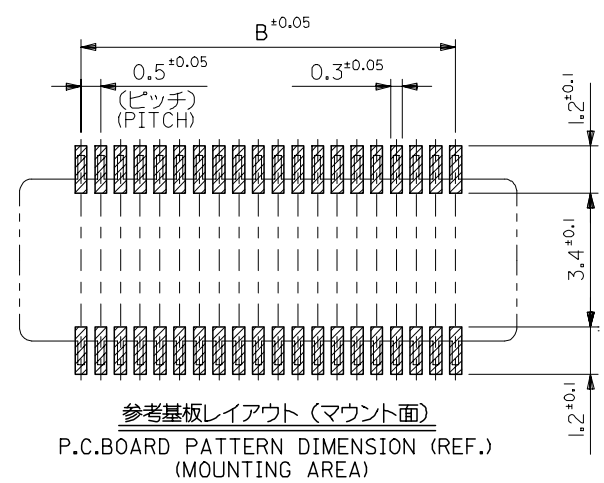
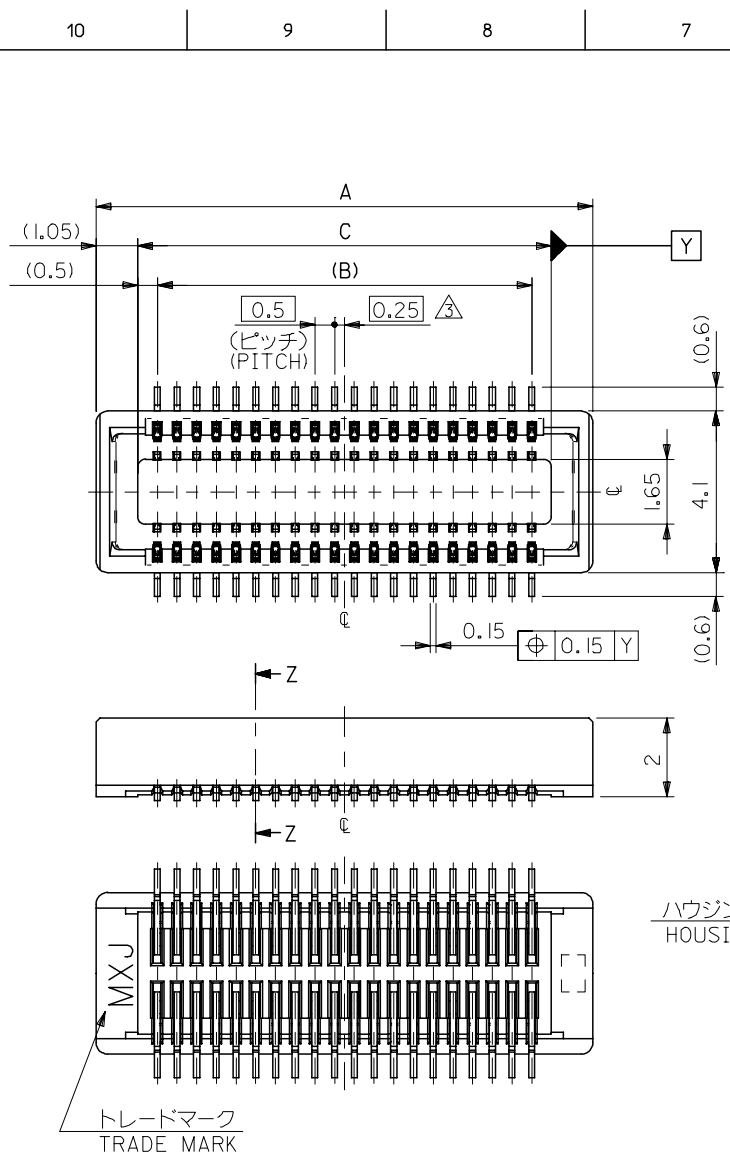
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

[54102Series](#)

Mates With

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

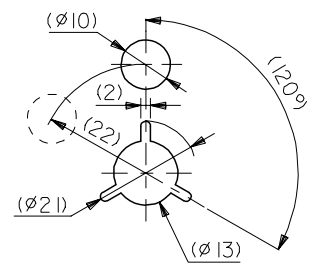
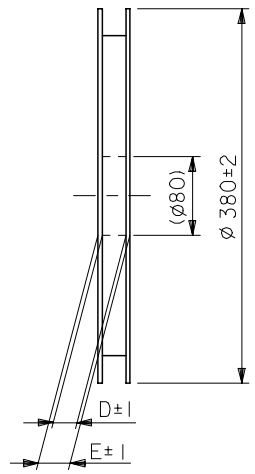
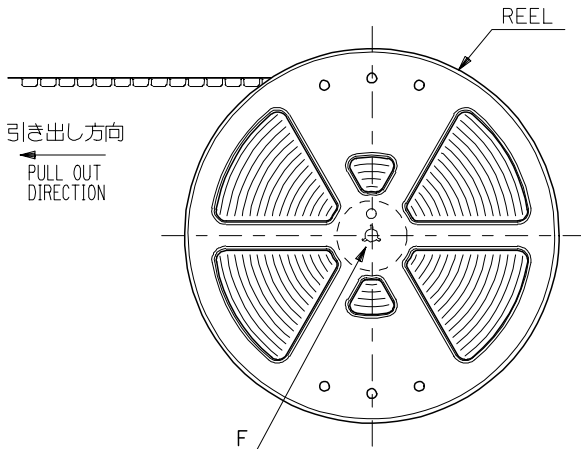


注記 NOTES:

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: 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

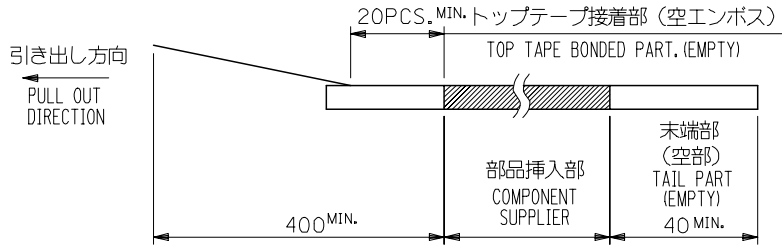
REVISED EC No: J2005-1175 DRAWN: MIMEDA 2004/10/29 CHKD: KTOYODA 2004/10/29 APPR: NUKITA 2004/11/01	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	±0.2	DRAWN BY Y. SAKIYA	DATE 2004/05/06	TITLE 0.5 B-TO-B CONN REC HSG ASSY(HGT=2.5)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



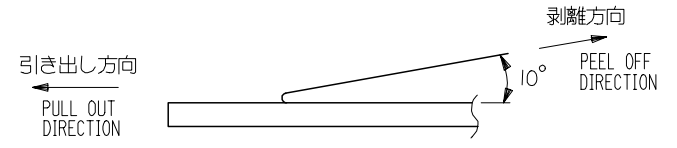
DETAIL F

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: MIMEDA 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		SIZE 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

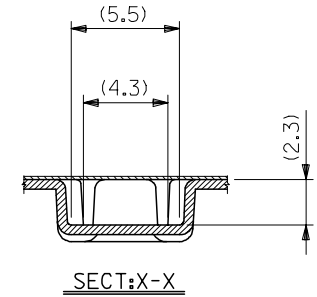
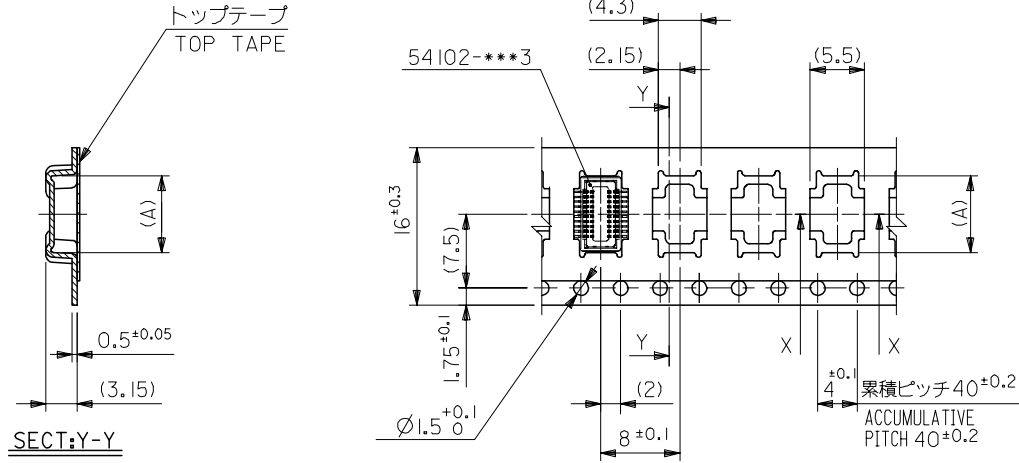
D

C

B

A

引き出し方向
PULL OUT DIRECTION



SECT:Y-Y

SECT:X-X

16mm幅キャリアテープ
16mm WIDTH CARRIER TAPE

16	21.4	17.4	7.8	54102-0204	20
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(A)	54102-0164	16
				MODEL NO.	54102-***4
				MATERIAL NO.	極数 CIRCUITS

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

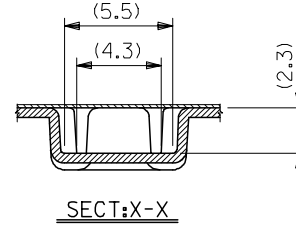
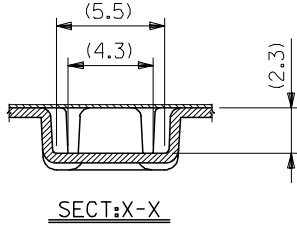
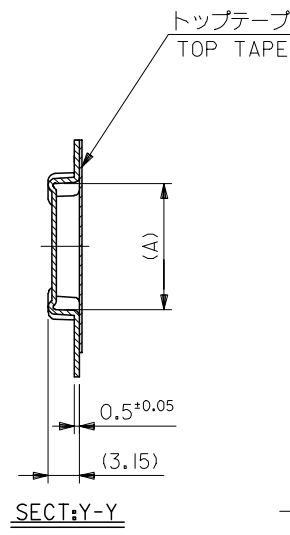
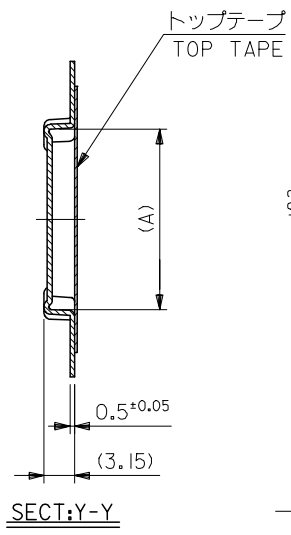
C

B

A

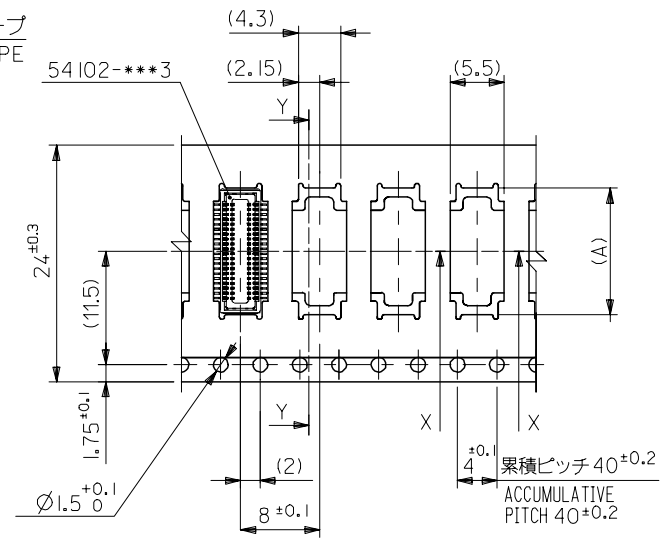
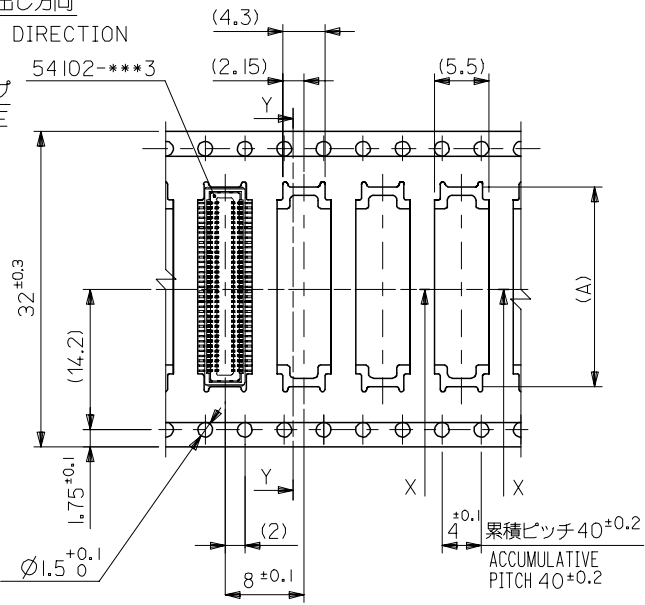
引き出し方向
PULL OUT DIRECTION

引き出し方向
PULL OUT DIRECTION



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



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		