

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

**Part Number:** [5019515010](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch Easy-On™ FFC/FPC Connector, Vertical, SMT, Gold Plating, 50 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-501951-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [501951](#)  
 MolexKits Yes  
 Product Name Easy-On™

**Physical**

Circuits (Loaded) 50  
 Circuits (maximum) 50  
 Color - Resin Brown, Natural  
 Contact Position N/A  
 Durability (mating cycles max) 20  
 Entry Angle Vertical  
 Mated Height (in) 0.159 In  
 Mated Height (mm) 4.05 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Gold  
 Number of Rows 1  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.020 In  
 Pitch - Mating Interface (mm) 0.50 mm  
 Pitch - Term. Interface (in) 0.020 In  
 Pitch - Term. Interface (mm) 0.50 mm  
 Polarized to PCB No  
 Stackable No  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -25°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FFC/FPC

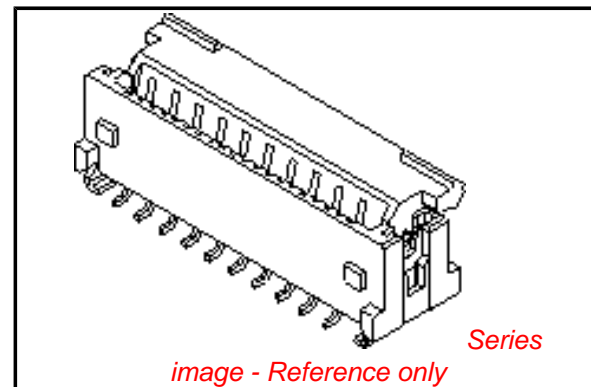
**Electrical**

Current - Maximum per Contact 0.4A  
 Voltage - Maximum 50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification SPK-501951-001  
 Product Specification PS-501951-002, RPS-501951-001, RPS-501951-002, RPS-501951-003, RPS-501951-004, RPS-501951-005, RPS-501951-006, RPS-501951-007, RPS-501951-009, RPS-501951-015  
 Sales Drawing SD-501951-003, SD-501951-004



**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](#)

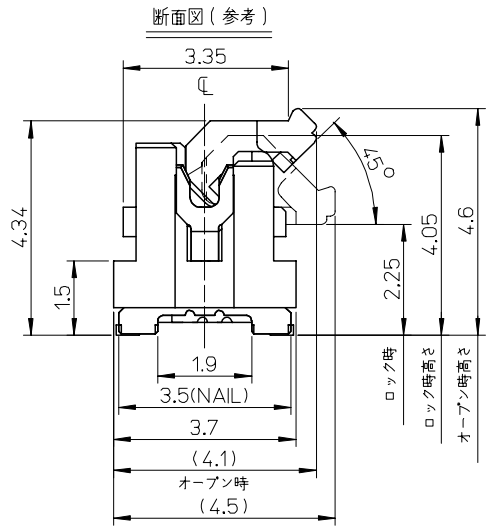
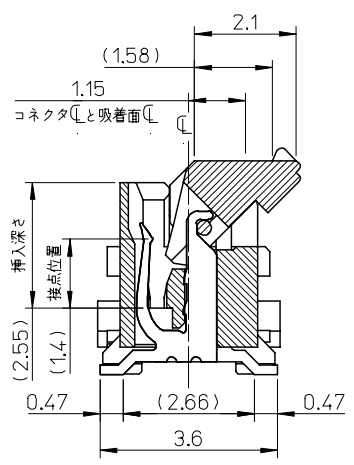
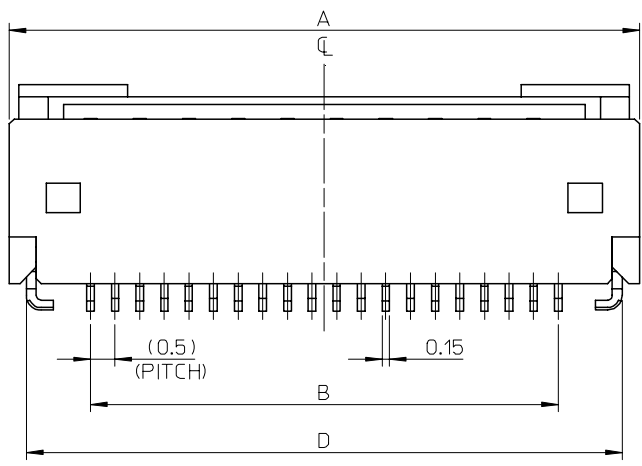
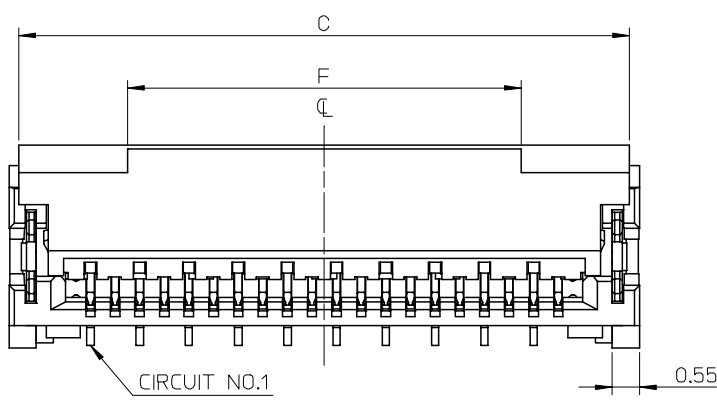
Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[501951Series](#)

This document was generated on 06/07/2010

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

10 9 8 7 6 5 4 3 2 1



注記 NOTES

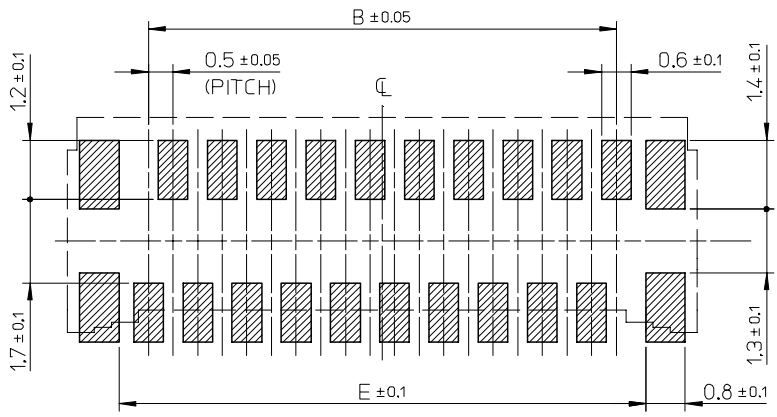
- 使用材料 MATERIAL
    - ハウジング : 液晶ポリマー ガラス充填, UL94V-0(白)
    - HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0 (WHITE)
    - アクチュエータ : ポリアミド 9T, ガラス充填, UL94V-0(茶)
    - ACTUATOR : POLYAMIDE 9T, GLASS FILLED, UL94V-0 (BROWN)
    - ターミナル : 銅合金(1=0.15)
    - TERMINAL : COPPER ALLOY
    - 金具 : 銅合金(1=0.2)
    - FITTING NAIL : COPPER ALLOY
  - めっき仕様 PLATING
    - ターミナル TERMINAL : ニッケル下鍍金めっき GOLD(Au) OVER NICKEL(Ni) PLATING.
    - 金具 FITTING NAIL : ニッケル下鍍金めっき TIN(Sn) OVER NICKEL(Ni) PLATING.
  - テールと金具を併せた平坦度は 0.1ミリメートル以下(リフロー前) TAILS AND NAILS COPLANARITY TO BE 0.1 MAX. (BEFORE REFLOW)
  - ELV及びRoHS適合品 ELV AND RoHS COMPLIANT
- ⚠ R0.3は、FPC導体部にかからないこと。 R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

8	35.7	37.1	37.4	34.5	37.8	501951-7019	70
	30.7	32.1	32.4	29.5	32.8	501951-6019	60
	25.7	27.1	27.4	24.5	27.8	501951-5019	50
	23.2	24.6	24.9	22	25.3	501951-4519	45
	20.7	22.1	22.4	19.5	22.8	501951-4019	40
	16.7	18.1	18.4	15.5	18.8	501951-3219	32
	15.7	17.1	17.4	14.5	17.8	501951-3019	30
	12.7	14.1	14.4	11.5	14.8	501951-2419	24
	11.7	13.1	13.4	10.5	13.8	501951-2219	22
	10.7	12.1	12.4	9.5	12.8	501951-2019	20
F	E	D	C	B	A	MATERIAL NO.	CIRCUITS

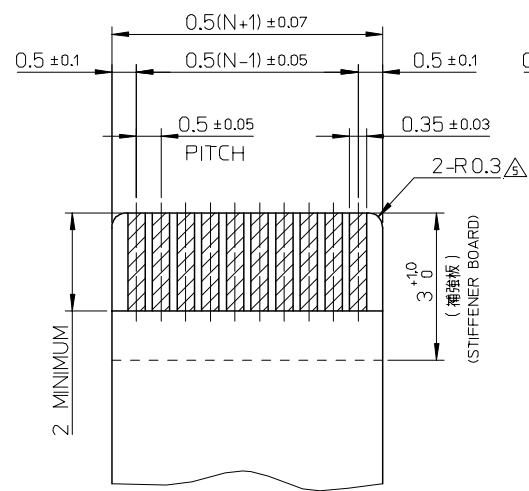
REVISED EC NO: J2008-1229 DRW:HYAJIMA 2007/10/11 CHKD:THARUYAMA 2007/10/11 APPR:NUKITA 2007/10/12	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
	10 UNDER	±0.2	DRAWN BY TRSUZUKI		DATE 2006/08/21		TITLE 0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD)		
	10 OVER 30 UNDER	±0.25	CHECKED BY HHIRATA		DATE 2006/08/21		MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY MSASAO		DATE 2006/08/21		DOCUMENT NO. SD-501951-003		
	ANGULAR	±1 °	MATERIAL NO.		SEE CHART		SHEET NO. 1 OF 2		
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

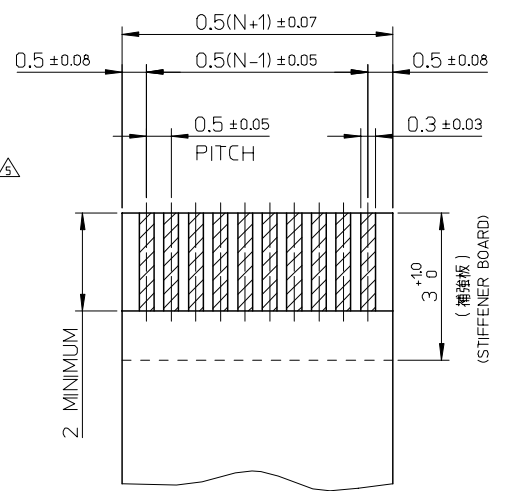


参考基板レイアウト(マウント面)  
P.C. BOARD PATTERN DIMENSION (REF.)  
(MOUNT AREA)



適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.3 ± 0.03)  
(THICKNESS: 0.3 ± 0.03)

N: 極数  
N: CIRCUITS



適合FFC推奨寸法  
APPLICABLE FFC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.3 ± 0.03)  
(THICKNESS: 0.3 ± 0.03)

N: 極数  
N: CIRCUITS

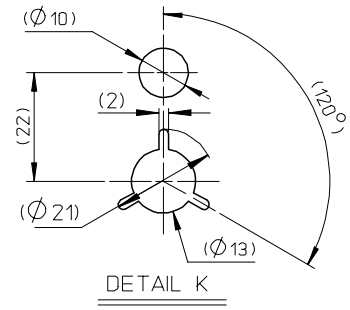
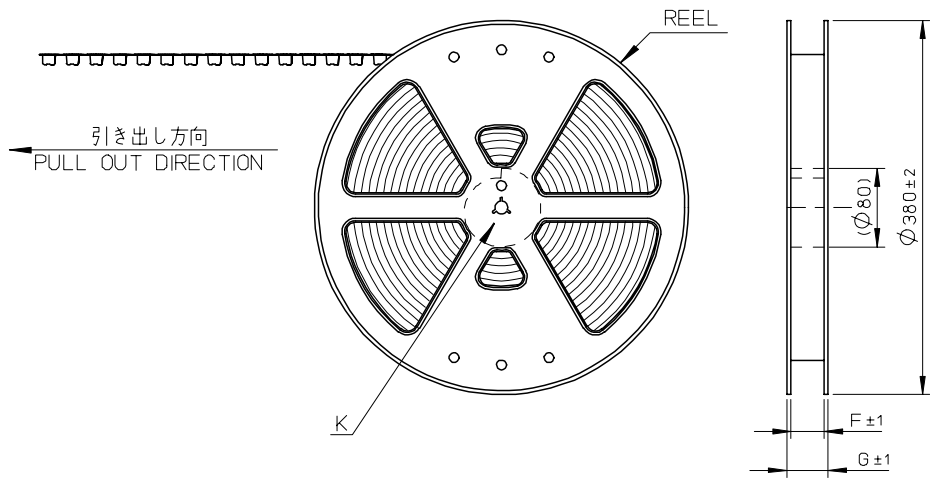
FPC について:

打ち抜き方向は導体側から補強板側を推奨します。  
導体部については軟銅箔35 $\mu$ mまたは50 $\mu$ mを推奨します。  
補強フィルム材質はポリイミドを推奨します。ベースフィルムは25 $\mu$ mを推奨します。  
接着剤は熱硬化接着剤を推奨します。  
尚、接着剤の接点部への付着は導通不良の原因になりますので、染み出しが無い様お願い致します。

ABOUT FPC

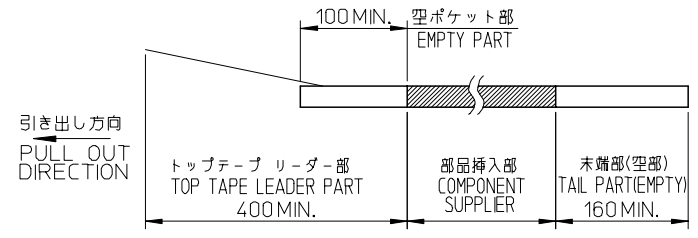
RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.  
RECOMMENDED CONDUCTOR SPEC :  
THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER.  
RECOMMENDED MATERIAL/THICKNESS.  
STIFFENER FILM : POLYIMIDE  
BASE FILM THICKNESS : 25 $\mu$ m  
BONDING AGENT : THERMOSETTING BONDING AGENT  
PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND BECAUSE THERE IS A POSSIBILITY THAT THE EXTRA ADHESIVE CAUSES THE DEFECT IN ELECTRICAL CONTINUITY.

SEE SHEET 1 EC NO: J2008-1229 DRW:HYAJIMA 2007/10/11 CHKD:THARUYAMA 2007/10/11 APPR:NUKITA 2007/10/12	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	± 0.2	DRAWN BY TRSUZUKI	DATE 2006/08/21	TITLE 0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD)			
	10 OVER 30 UNDER	± 0.25	CHECKED BY HHRATA	DATE 2006/08/21				
	30 OVER	± 0.3	APPROVED BY MSASAO	DATE 2006/08/21	MOLEX INCORPORATED			
	ANGULAR	± 1 °	MATERIAL NO.					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-501951-003		2 OF 2		
SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								



NOTES

- 製品詳細寸法については図面 SD-501951-003を参照下さい。  
FOR DIMENSIONS OF PRODUCT, REFER TO RSD-501951-007.
- 梱包数量 : 2000個/リール  
NUMBER OF CONNECTORS : 2000PIECES/REEL
- リードテープ長さ  
LEAD TAPE LENGTH



4. 材料 MATERIAL

キャリアテープ : ポリプロピレン  
CARRIER TAPE : POLYPROPYLENE  
トップテープ : ポリエチレンテレフタレート, ポリエチレン  
TOP TAPE : POLYETHYLENE TEREPHTHALATE , POLYETHYLENE  
リール : ポリスチレン<リサイクル材を含む>  
REEL : POLYSTYRENE<RECYCLE MATERIAL CONTAINED>

5. ELV及びRoHS適合品 ELV AND RoHS COMPLIANT

REVISED EC NO: J2008-1229 DRW:HYAJIMA 2007/10/11 CHKD:THARUYAMA 2007/10/11 APPR:NUKITA 2007/10/12	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY TRSUZUKI	DATE 2006/09/05	TITLE 0.5 FPC CONN. HSG ASSY E/O STRAIGHT EMBSTP PKG (GOLD)			
	10 OVER 30 UNDER	±0.25	CHECKED BY HIRATA	DATE 2006/09/05	APPROVED BY MSASAO			
	30 OVER	±0.3	APPROVED BY MSASAO		DATE 2006/09/05	MOLEX INCORPORATED		
	ANGULAR	±1 °	MATERIAL NO. SEE SHEET 2		DOCUMENT NO. SD-501951-004	SHEET NO. 1 OF 2		
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

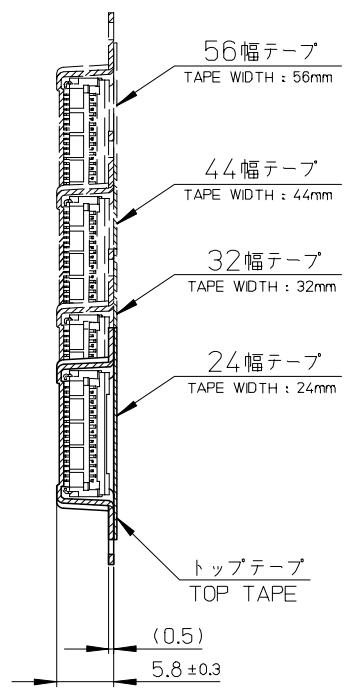
D

C

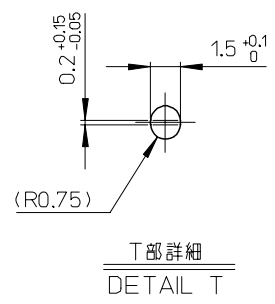
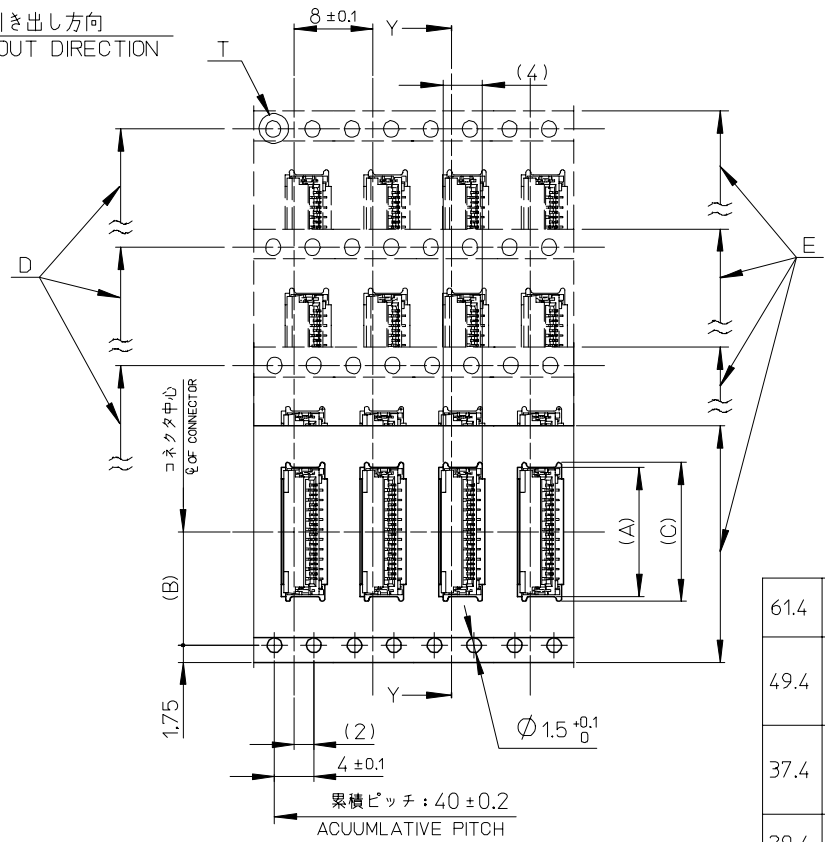
B

A

引き出し方向  
PULL OUT DIRECTION



断面 Y-Y  
SECTION Y-Y



61.4	57.4	56 ± 0.3	52.4	39.1	26.2	38.1	501951-7010	70
				34.1		33.1	501951-6010	60
49.4	45.4	44 ± 0.3	40.4	29.1	20.2	28.1	501951-5010	50
				24.1		25.6	501951-4510	45
				20.1		23.1	501951-4010	40
37.4	33.4	32 ± 0.3	28.4	19.1	14.2	19.1	501951-3210	32
				16.1		18.1	501951-3010	30
				15.1		15.1	501951-2410	24
29.4	25.4	24 ± 0.3		14.1	11.5	14.1	501951-2210	22
				14.1		13.1	501951-2010	20
G	F	E キャリアテープ幅 CARRIER TAPE WIDTH	D	(C)	(B)	(A)	製品番号 MATERIAL NO.	極数 CIRCUITS

SEE SHEET 1 EC NO: J2008-1229 DRW: HVAJIMA 2007/10/11 CHKD: THARUYAMA 2007/10/11 APPR: NUKITA 2007/10/12	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	± 0.2	DRAWN BY TRSUZUKI	DATE 2006/09/05	TITLE 0.5 FPC CONN. HSG ASSY E/O STRAIGHT EMBSTP PKG (GOLD)			
	10 OVER 30 UNDER	± 0.25	CHECKED BY HIRATA	DATE 2006/09/05	MOLEX INCORPORATED			
	30 OVER	± 0.3	APPROVED BY MSASAO	DATE 2006/09/05	DOCUMENT NO. SD-501951-004		SHEET NO. 2 OF 2	
	ANGULAR	± 1 °	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				