

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0514411272

Status:

Active

Description:

0.50mm (.020") Pitch Easy-On™ Type FFC/FPC Connector, Right Angle, SMT, ZIF, Bottom Contact Style, 1.10mm (.043") Mated Height, 12 Circuits, Lead-free, Selective Gold (Au) Contact Plating

Documents:

3D Model

Drawing (PDF)

Product Specification PS-51441-006 (PDF)

RoHS Certificate of Compliance (PDF)

General

Product Family

Series

Product Name

FFC/FPC Connectors

51441

Easy-On™

Physical

Circuits (Loaded)

Circuits (maximum)

Color - Resin

Contact Position

Durability (mating cycles max)

Entry Angle

Mated Height (in)

Mated Height (mm)

Material - Metal

Material - Plating Mating

Material - Plating Termination

Material - Resin

Number of Rows

Orientation

PCB Locator

PCB Retention

Packaging Type

Pitch - Mating Interface (in)

Pitch - Mating Interface (mm)

Pitch - Term. Interface (in)

Pitch - Term. Interface (mm)

Plating min: Mating (µin)

Plating min: Mating (µm)

Plating min: Termination (µin)

Plating min: Termination (µm)

Polarized to PCB

Stackable

Surface Mount Compatible (SMC)

Temperature Range - Operating

Termination Interface: Style

Wire/Cable Type

12

12

Black, Natural

Bottom

20

90° Angle

0.043 In

1.10 mm

Phosphor Bronze

Gold

Gold

High Temperature Thermoplastic

1

Right Angle

No

None

Embossed Tape on Reel

0.020 In

0.50 mm

0.020 In

0.50 mm

4

0.1

2

0.05

No

No

Yes

-20°C to +85°C

Surface Mount

FFC/FPC

Electrical

Current - Maximum per Contact

Voltage - Maximum

0.5A

50V AC (RMS)/DC

Material Info

Reference - Drawing Numbers

Product Specification

PS-51441-006, RPS-51441-015, RPS-51441-021, RPS-51441-024, RPS-51441-025, RPS-51441-030

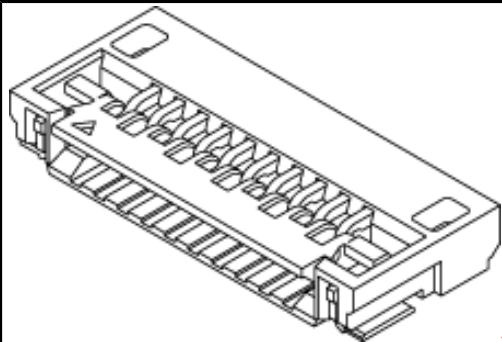


image - Reference only

Series

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

51441Series

This document was generated on 04/15/2010

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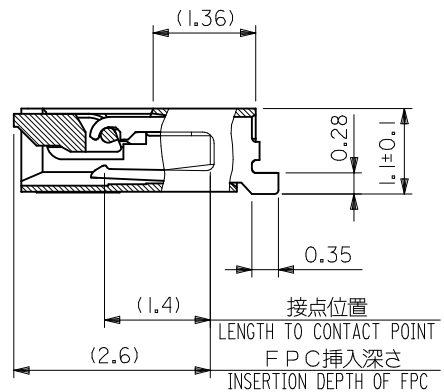
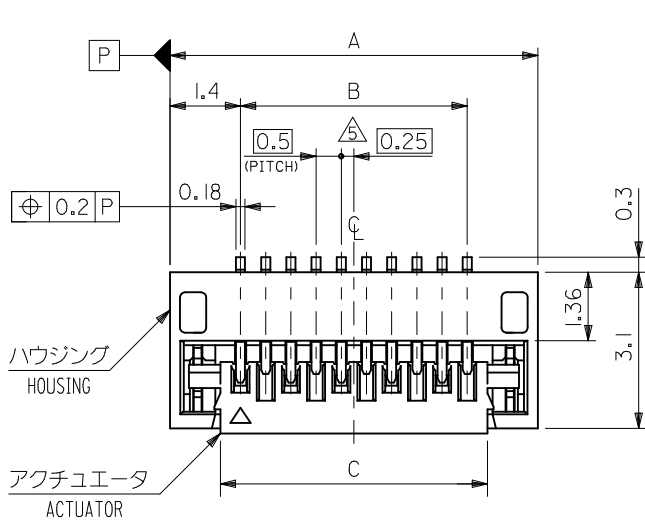
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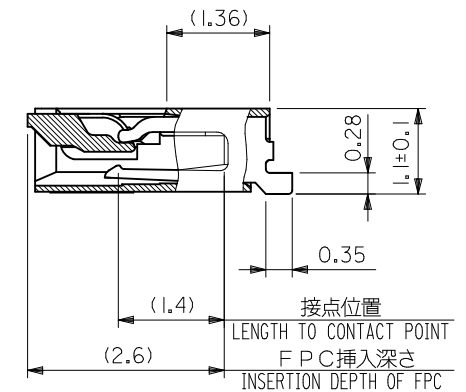
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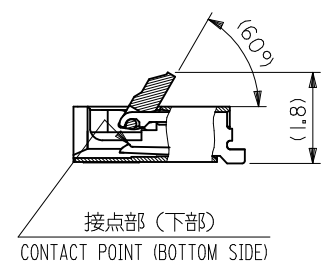
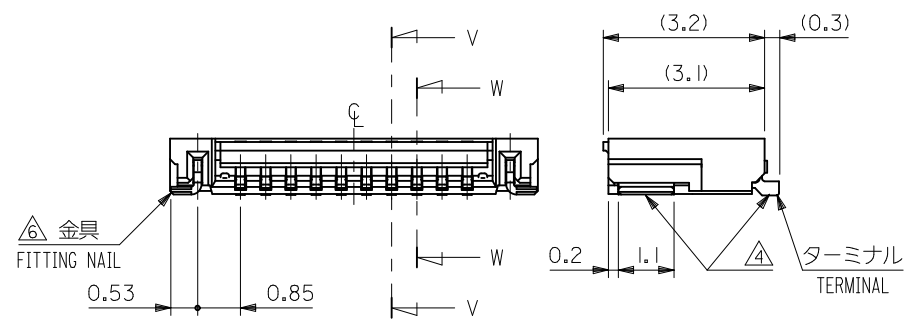
10 9 8 7 6 5 4 3 2 1



断面 V-V 奇数極 (ODD CKT)
SECT. V-V



断面 W-W 偶数極 (EVEN CKT)
SECT. W-W



(アクチュエータが開いた状態)
(WHEN ACTUATOR IS OPENED)

12.3	11.5	14.3	51441-2472	24
11.3	10.5	13.3	51441-2272	22
10.3	9.5	12.3	51441-2072	20
6.3	5.5	8.3	51441-1272	12
5.8	5.0	7.8	51441-1172	11
5.3	4.5	7.3	51441-1072	10
4.3	3.5	6.3	51441-0872	8
C	B	A	EMBOSSED TAPE	極数
			ORDER No. オーダー番号	CIRCUIT
CONNECTOR SERIES NO. 51441-**28				

REVISED EC NO: J2010-1656 DRWN: TONO CHKD: HSHIMOTO APPR: KMORI KAWA G	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION				
				MM ONLY		10:1	METRIC					
		10 UNDER	±0.2	DRAWN BY M. NABEI	DATE '05/06/29	TITLE 0.5 FPC CONN. (E/O) HSG ASSY BTM CONT(H=1.1)						
		10 OVER 30 UNDER	±0.25	CHECKED BY K. TOYODA	DATE '05/06/29							
		30 OVER	±0.3	APPROVED BY N. UKITA	DATE '05/06/29	MOLEX INCORPORATED						
		ANGULAR ±3 °		MATERIAL NO.						DOCUMENT NO.		SHEET NO.
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE						SD-51441-012		1 OF 2
				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

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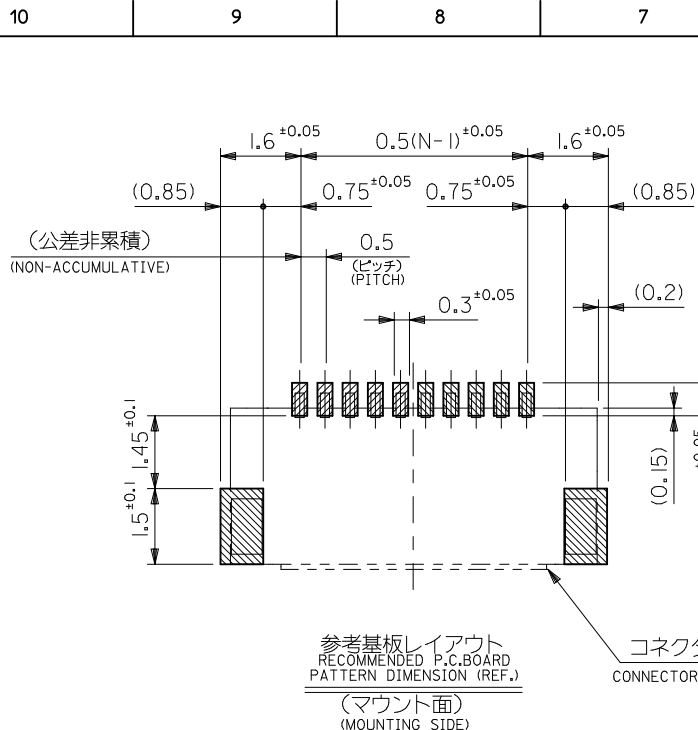
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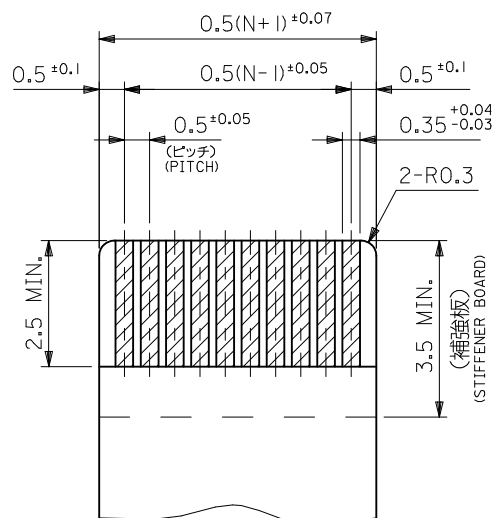
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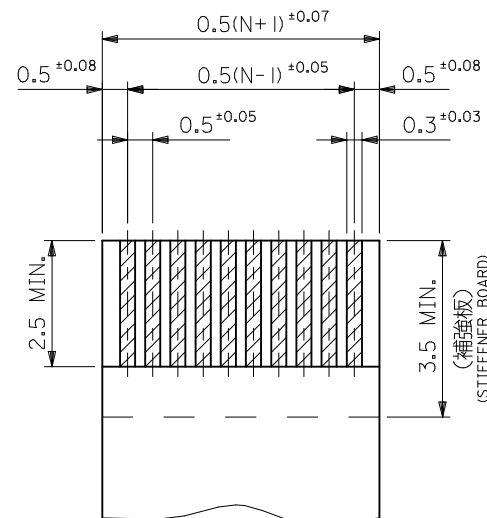


参考基板レイアウト
RECOMMENDED P.C.BOARD
PATTERN DIMENSION (REF.)
(マウント面)
(MOUNTING SIDE)

コネクタ位置
CONNECTOR POSITION



適用FPC推奨寸法
APPLICABLE FPC
RECOMMENDED DIMENSION
(仕上がり厚さ: 0.3^{+0.03})
(THICKNESS: 0.3^{+0.03})



適用FFC推奨寸法
APPLICABLE FFC
RECOMMENDED DIMENSION
(仕上がり厚さ: 0.3^{+0.03})
(THICKNESS: 0.3^{+0.03})

注記 NOTES

1. 使用材料 MATERIAL

ハウジング : 液晶ポリマー ガラス充填、UL94V-0 (ベージュ)
HOUSING : LIQUID CRYSTAL POLYMER GLASS FILLED, UL94V-0(BEIGE)
アクチュエータ : ポリフェニレンサルファイド ガラス充填、UL94V-0 (黒)
ACTUATOR : POLYPHENYLENE SULFIDE GLASS FILLED, UL94V-0(BLACK)
ターミナル : リン青銅 (t=0.18)
TERMINAL : PHOSPOR BRONZE
金具 : リン青銅 (t=0.15)
FITTING NAIL : PHOSPOR BRONZE

2. メッキ仕様 PLATING

ターミナル TERMINAL
ニッケル下地金メッキ
GOLD OVER NICKEL PLATING
金具 FITTING NAIL
ニッケル下地金メッキ
TIN OVER NICKEL PLATING

3. エンボステープ梱包時は、アクチュエータが閉じた状態とする。

IN THE PACKAGE, ACTUATOR OF PART NO.51441-**-11 SHOULD BE CLOSED.

△ソルダーテール及び金具の平坦度は、0.1以下。

SOLDER TAIL AND FITTING NAIL COPLANARITY TO BE 0.1 MAXIMUM.

△偶数極に適用。

APPLY FOR EVEN CIRCUIT.

△パターンはくり止め用金具

FITTING NAIL FOR PREVENTION OF PEELING OF PCB PATTERN.

7. 本製品は 51441-**-29 の部分金メッキ品である。

THIS PRODUCT IS SELECTIVE GOLD OF 51441-**-29.

8. ELV AND RoHS COMPLIANT.

FPC/FFCについて:

打抜き方向は導体側から補強板側を推奨いたします。

導体部については軟銅箔35マイクロメートルまたは50マイクロメートルを推奨いたします。

ABOUT FPC/FFC

RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.

RECOMMENDED CONDUCTOR SPEC :

THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER

FPCについて:

補強フィルム材質はポリイミドを推奨します。

接着剤は熱硬化接着剤を推奨します。

ABOUT FPC

RECOMMENDED MATERIAL :

STIFFENER FILM : POLYIMIDE

BONDING AGENT : THERMOSETTING BONDING AGENT

REVISED	EC NO. J2010-1656	2010/02/15	DRWN: TONO	2010/02/15	CHKD: SHIMIZUYAMA	2010/02/15	APPR: KMORI KAWA	2010/02/15	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
									10 UNDER ± 0.2		DRAWN BY M. NABEI		DATE '05/06/29		TITLE 0.5 FPC CONN. (E/O) HSG ASSY BTM CONT(H=1.1)			
									10 OVER 30 UNDER ± 0.25		CHECKED BY K. TOYODA		DATE '05/06/29					
									30 OVER ± 0.3		APPROVED BY N. UKITA		DATE '05/06/29		MOLEX INCORPORATED			
									ANGULAR ±3 °		MATERIAL NO.		DOCUMENT NO.					
									DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-51441-012		2 OF 2			
G		REV		A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												

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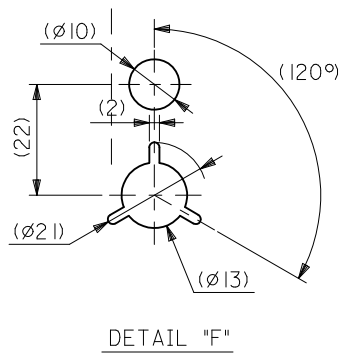
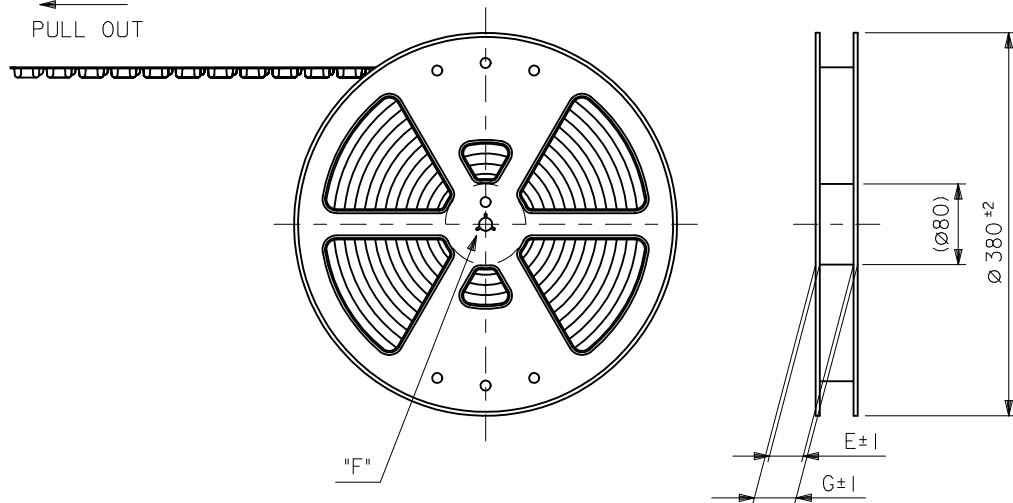
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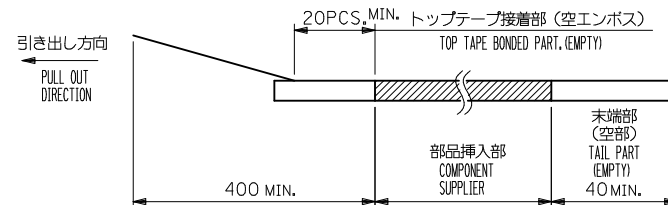
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引き出し方向
PULL OUT

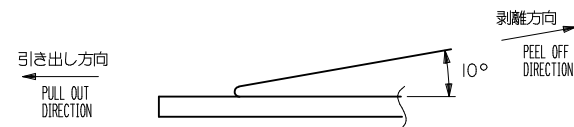


注記 NOTES

- 製品詳細寸法については、図面 SD-51441-012 を参照下さい。
RE DETAILED DIMENSION, SEE SD-51441-012.
- 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 (TOP TAPE) : PET, PE, PEF
リール (REEL) : ポリスチレン (PS) <リサイクル材を含む>
POLYSTYRENE (PS) <RECYCLE MATERIAL CONTAINED>
- 本製品は 51441-**71 の部分金メッキ品である。
THIS PRODUCT IS SELECTIVE GOLD OF 51441-**71.
- ELV AND RoHS COMPLIANT.

REVISED EC NO: J2010-1656 DRWN: TONO CHKD: SHIMOMURA APPR: KIMORI KAWA	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	± 0.2	DRAWN BY M. NABEI	DATE '05/06/29	TITLE EMBSTP PKG FOR 0.5 FPC CONN E/O BTM CONT				
		10 OVER 30 UNDER	± 0.25	CHECKED BY K. TOYODA	DATE '05/06/29					
		30 OVER	± 0.3	APPROVED BY N. UKITA	DATE '05/06/29	MOLEX INCORPORATED				
		ANGULAR ±3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 2 OR 3		SD-51441-013		1 OF 3		
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

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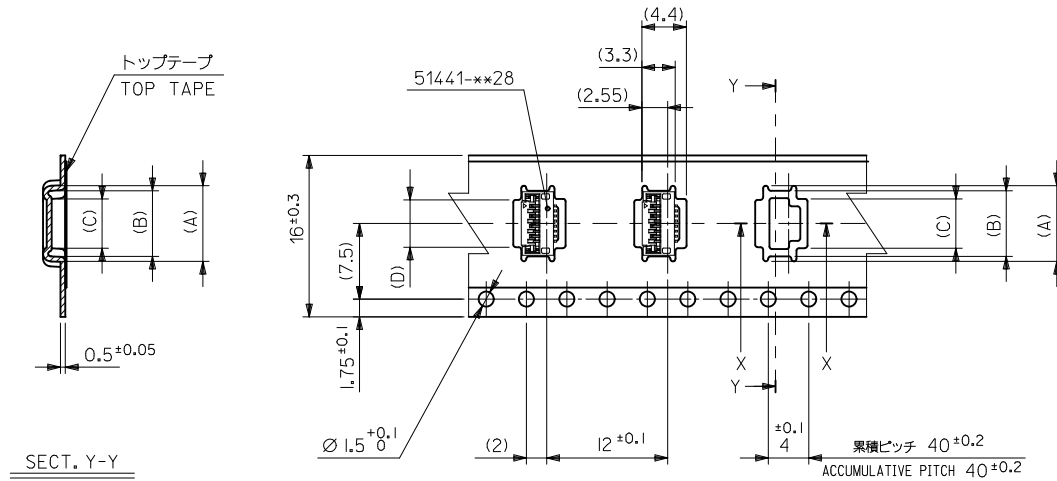
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引き出し方向
PULL OUT DIRECTION



SECT. Y-Y

SECT. X-X

16 mm幅キャリアテープ
16mm WIDTH CARRIER TAPE

16	21.4	17.4	4.7	4.89	6.5	7.5	51441-0872	8
キャリアテープ幅 CARRIER TAPE WIDTH	G	E	(D)	(C)	(B)	(A)	製品番号 MATERIAL NO.	種数 CIRCUIT

REVISED EC NO.: J2010-1656 DRWN: TONO CHKD: HSHIMOTOYAMA APPR: KMORI KAWA	2010/02/15 2010/02/15 2010/02/15	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
					MM ONLY		---	METRIC		
			10 UNDER	±0.2	DRAWN BY	DATE	TITLE EMBSTP PKG FOR 0.5 FPC CONN E/O BTM CONT			
			10 OVER 30 UNDER	±0.25	CHECKED BY	DATE				
			30 OVER	±0.3	APPROVED BY	DATE				
			ANGULAR ±3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-51441-013		2 OF 3				
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

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REVISED	EC NO.: J2010-1656	2010/02/15 DRWN: TONO CHKD: HISHI MOYAMA APPR: K MORIKAWA	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC		THIRD ANGLE PROJECTION
				10 UNDER	± 0.2	DRAWN BY M. NABEI	DATE '05/06/29	TITLE EMBSTP PKG FOR 0.5 FPC CONN E/O BTM CONT			
				10 OVER 30 UNDER	± 0.25	CHECKED BY K. TOYODA	DATE '05/06/29				
				30 OVER	± 0.3	APPROVED BY N. UKITA	DATE '05/06/29	MOLEX INCORPORATED			
				ANGULAR ±3 °		MATERIAL NO.					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-51441-013		3 OF 3	
TI	REV			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						