

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0514412272](#)
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, 22 Circuits, Lead-free, Gold Contact Plating

Documents:

[3D Model](#) [Product Specification PS-51441-006 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

General

Product Family	FFC/FPC Connectors
Series	51441
Product Name	Easy-On™

Physical

Circuits (Loaded)	22
Circuits (maximum)	22
Color - Resin	Black, Natural
Contact Position	Bottom
Durability (mating cycles max)	20
Entry Angle	90° Angle
Mated Height (in)	0.043 In
Mated Height (mm)	1.10 mm
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Gold
Material - Resin	High Temperature Thermoplastic
Number of Rows	1
Orientation	Right Angle
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
Pitch - Term. Interface (in)	0.020 In
Pitch - Term. Interface (mm)	0.50 mm
Plating min: Mating (µin)	4
Plating min: Mating (µm)	0.1
Plating min: Termination (µin)	2
Plating min: Termination (µm)	0.05
Polarized to PCB	No
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-20°C to +85°C
Termination Interface: Style	Surface Mount
Wire/Cable Type	FFC/FPC

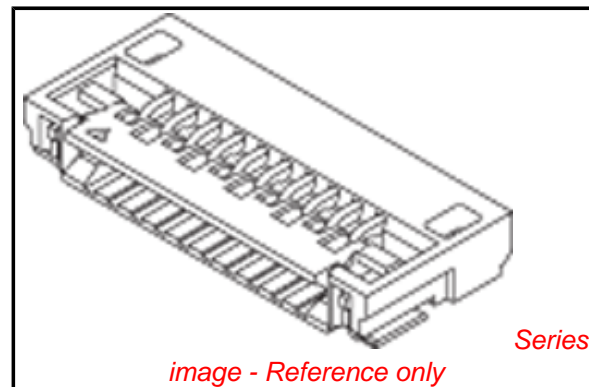
Electrical

Current - Maximum per Contact	0.5A
Voltage - Maximum	50V AC (RMS)/DC

Material Info

Reference - Drawing Numbers

Product Specification	PS-51441-006, RPS-51441-021, RPS-51441-024, RPS-51441-025, RPS-51441-030
-----------------------	--



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](#)

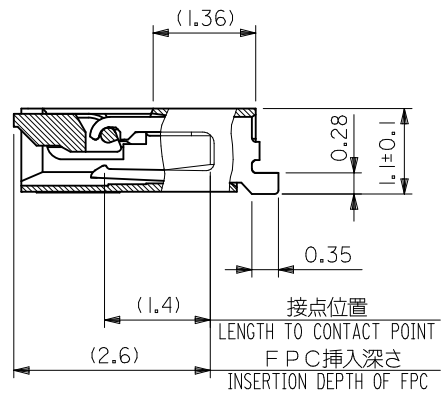
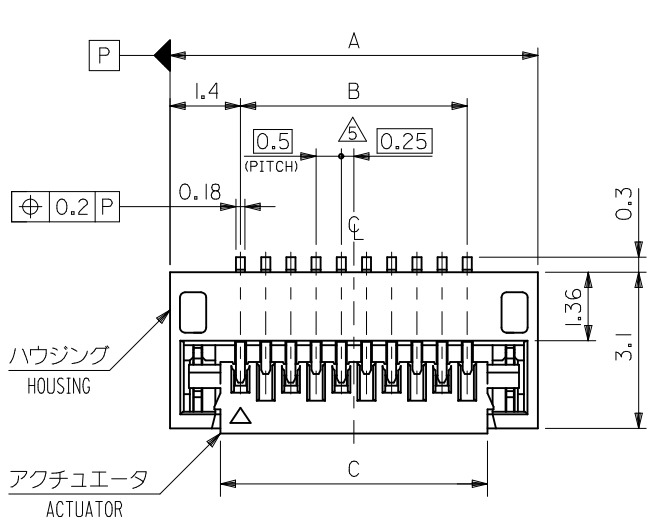
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series
[51441Series](#)

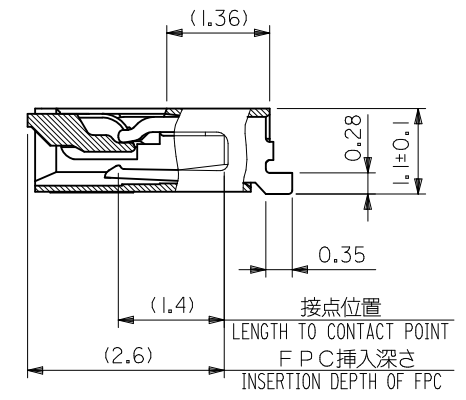
This document was generated on 04/15/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

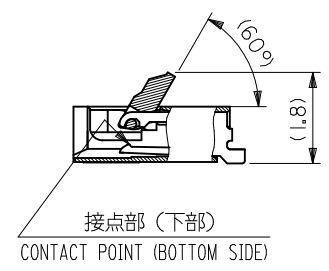
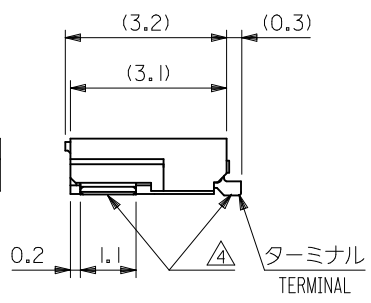
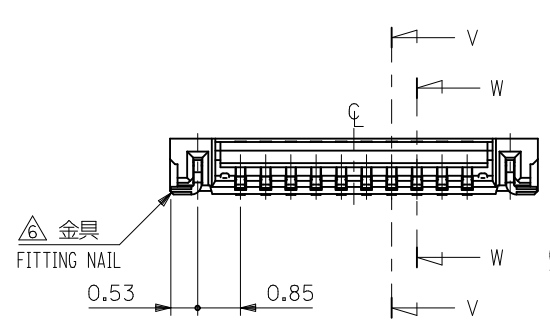
10 9 8 7 6 5 4 3 2 1



断面 V-V 奇数極 (ODD CKT)
SECT. V-V



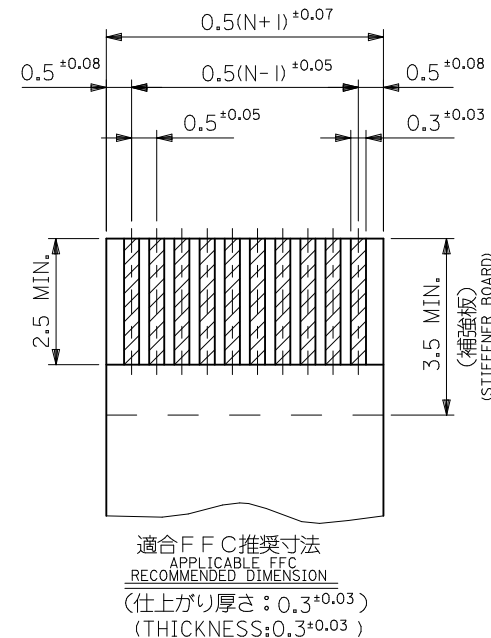
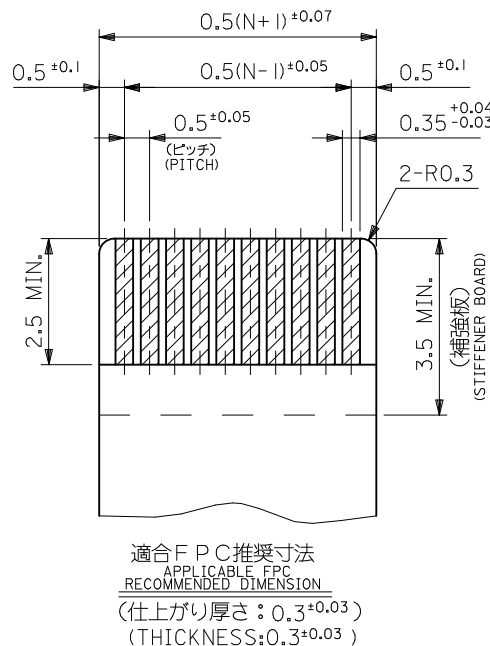
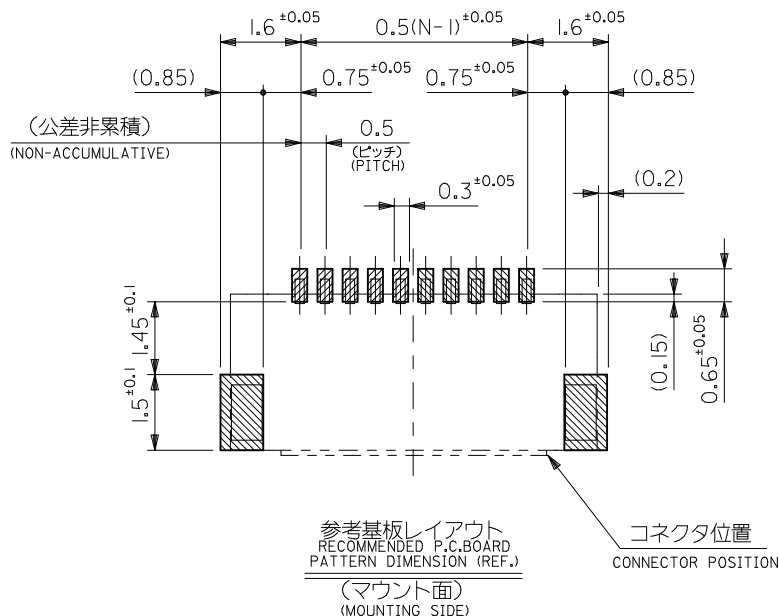
断面 W-W 偶数極 (EVEN CKT)
SECT. W-W



(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 2010/02/15 CHKD: SHIMOMIYAMA 2010/02/15 APPR: KMORIKAWA 2010/02/15	DESCRIPTION	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	MOLEX INCORPORATED DOCUMENT NO. SD-51441-012 SHEET NO. 1 OF 2			
		30 OVER	±0.3	APPROVED BY N. UKITA	DATE '05/06/29				
G	REV	ANGULAR ±3 °	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				



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-**-II SHOULD BE CLOSED.
△ソルダータ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:

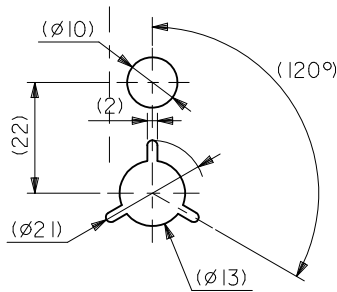
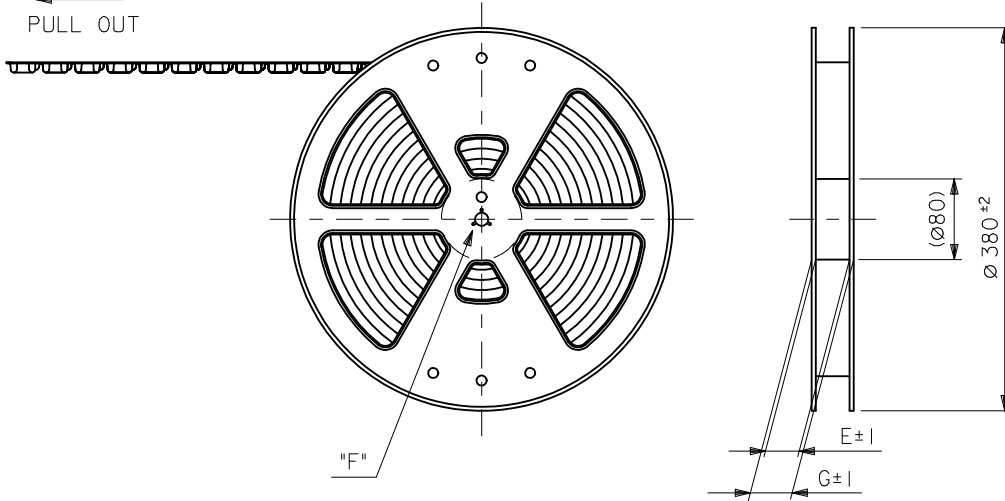
打抜き方向は導体側から補強板側を推奨いたします。
導体部については軟銅箔35マイクロメートルまたは50マイクロメートルを推奨いたします。
ABOUT FPC/FFC
RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.
RECOMMENDED CONDUCTOR SPEC :
THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER

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 DRWN: TONO 2010/02/15 CHKD: HSHIMOIYAMA 2010/02/15 APPR: KMORIKAWA 2010/02/15	DESCRIPTION	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	MOLEX INCORPORATED DOCUMENT NO. SD-51441-012 SHEET NO. 2 OF 2			
		30 OVER	±0.3	APPROVED BY N. UKITA	DATE '05/06/29				
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

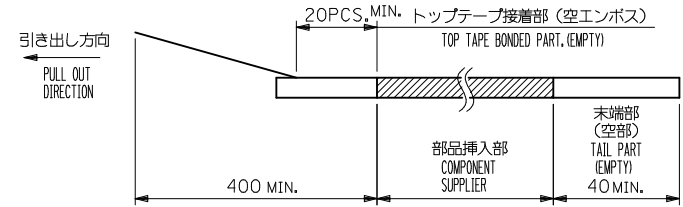
引き出し方向
PULL OUT



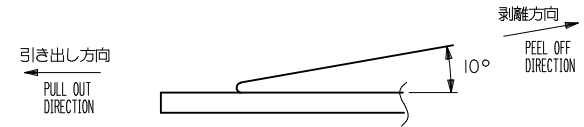
DETAIL "F"

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



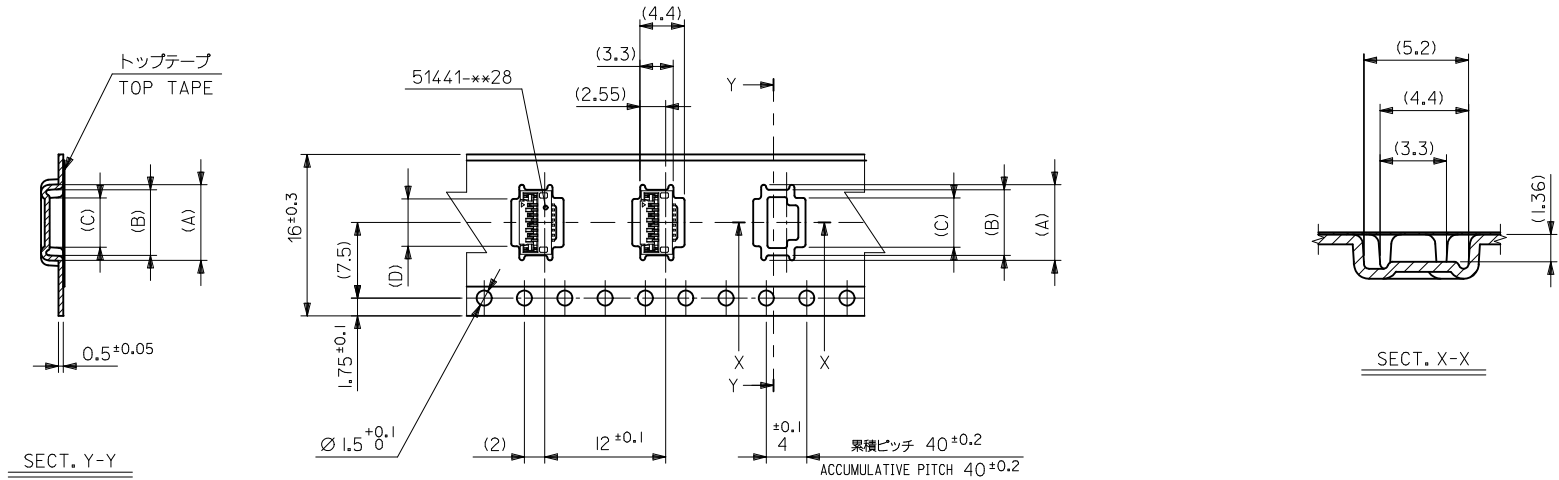
- トップテープの剥離強度：0.1~1.3N(10~130gf)
(剥離方向は下図参照)
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)
PEELING OFF FORCE OF TOP TAPE : 0.1~1.3N(10~130gf)
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.
PEEL OFF SHOULD NOT BE ALLOWED, DURING TRANSPORTATION.



- 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 2010/02/15 CHKD: SHIMOMIYAMA 2010/02/15 APPR: KMORIKAWA 2010/02/15	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	MOLEX INCORPORATED			
	30 OVER	± 0.3	APPROVED BY N. UKITA	DATE '05/06/29				
ANGULAR	± 3 °	MATERIAL NO. SEE SHEET 2 OR 3		DOCUMENT NO. SD-51441-013		SHEET NO. 1 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						

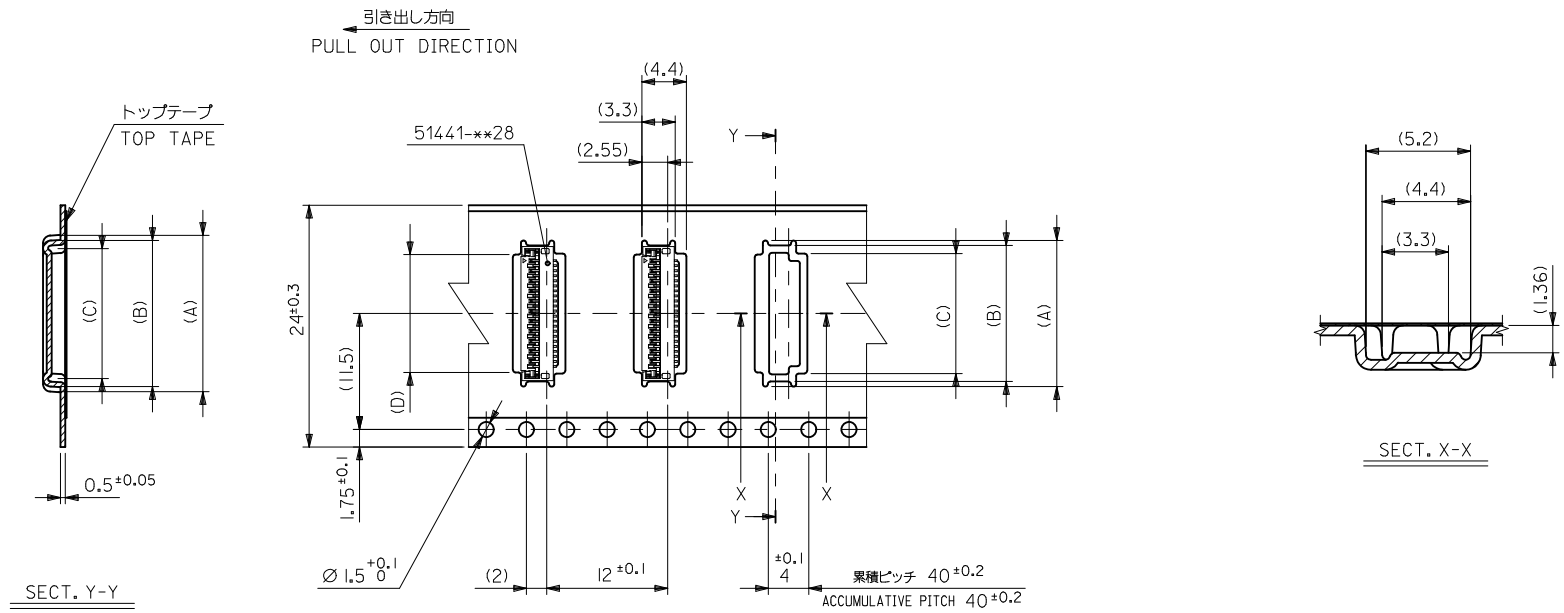
引き出し方向
PULL OUT DIRECTION



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 2010/02/15 CHK'D: SHIMOMIYAMA 2010/02/15 APPR: KMORI KAWA 2010/02/15	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		MOLEX INCORPORATED SD-51441-013			
	30 OVER	±0.3	APPROVED BY N. UKITA		DATE '05/06/29					
REV	DESCRIPTION	ANGULAR ±3 °		MATERIAL NO. SEE TABLE		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS								



24mm幅キャリアテープ
24mm WIDTH CARRIER TAPE

24	29.4	25.4	12.7	12.89	14.5	15.5	51441-2472	24
			11.7	11.89	13.5	14.5	51441-2272	22
			10.7	10.89	12.5	13.5	51441-2072	20
			6.7	6.89	8.5	9.5	51441-1272	12
			6.2	6.39	8.0	9.0	51441-1172	11
			5.7	5.89	7.5	8.5	51441-1072	10
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 2010/02/15 CHKD: SHIHOYAMA 2010/02/15 APPR: KMORIKAWA 2010/02/15	DESCRIPTION GENERAL TOLERANCES (UNLESS SPECIFIED) 10 UNDER ±0.2 10 OVER 30 UNDER ±0.25 30 OVER ±0.3 ANGULAR ±3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		DRAWN BY M. NABEI	DATE '05/06/29	TITLE EMBSTP PKG FOR 0.5 FPC CONN E/O BTM CONT					
		CHECKED BY K. TOYODA	DATE '05/06/29	MOLEX INCORPORATED					
		APPROVED BY N. UKITA	DATE '05/06/29	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-51441-013	SHEET NO. 3 OF 3			
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							