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Part Number:

0512810694

Status:

Active

Overview:

Description:

0.50mm (.020") Pitch FFC/FPC Connector, SMT, Right Angle, Non-ZIF, Dual Contact Style, 1.20mm (.047") Mated Height, 6 Circuits, Lead-free, Gold (Au) Plating

General

Product Family	FFC/FPC Connectors
Series	51281
Overview	ffc_fpc_smt
Product Name	N/A
Physical	
Circuits (Loaded)	6
Color - Resin	Natural
Contact Position	Dual
Durability (mating cycles max)	20
Entry Angle	90° Angle
Mated Height (in)	0.047 In
Mated Height (mm)	1.20 mm
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	1
Orientation	Right Angle
PC Tail Length (in)	0.020 In
PC Tail Length (mm)	0.50 mm
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
Plating min: Mating (µin)	4
Plating min: Mating (µm)	0.1
Plating min: Termination (µin)	40
Plating min: Termination (µm)	1
Polarized to PCB	Yes
Stackable	No
Surface Mount Compatible (SMC)	N/A
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

Material Info

Reference - Drawing Numbers

Packaging Specification	SPK-51281-001
Product Specification	PS-51281-003, RPS-51281-012, RPS-51281-015, RPS-51281-016, RPS-51281-017, RPS-51281-018, RPS-51281-019
Sales Drawing	SD-51281-011, SD-51281-012

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

For a multiple part number RoHS Certificate of Compliance, [click here](#)

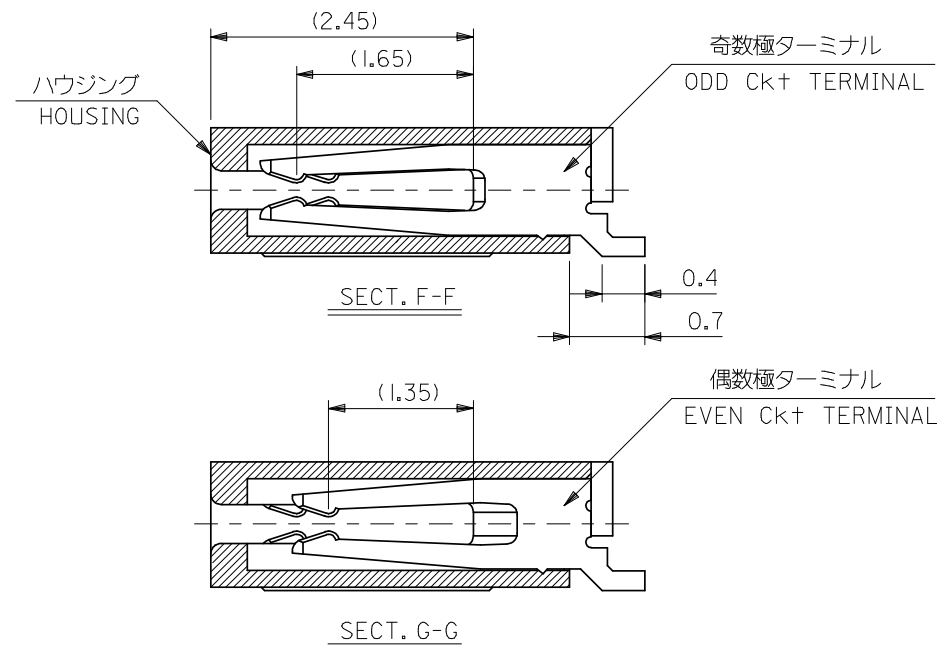
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

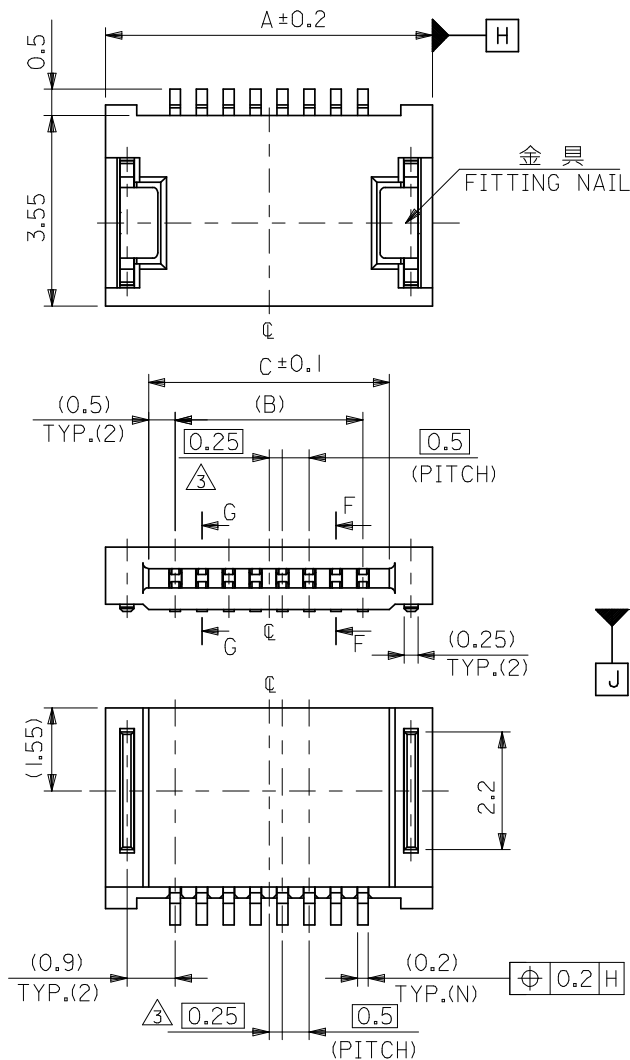
51281Series

This document was generated on 06/04/2010

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13.5	12.5	15.1	51281-2694	51281-2640	26
12.5	11.5	14.1	51281-2494	51281-2440	24
11.5	10.5	13.1	51281-2294	51281-2240	22
10.5	9.5	12.1	51281-2094	51281-2040	20
9.5	8.5	11.1	51281-1894	51281-1840	18
8.5	7.5	10.1	51281-1694	51281-1640	16
7.5	6.5	9.1	51281-1494	51281-1440	14
6.5	5.5	8.1	51281-1294	51281-1240	12
5.5	4.5	7.1	51281-1094	51281-1040	10
5.0	4.0	6.6	51281-0994	51281-0940	9
4.5	3.5	6.1	51281-0894	51281-0840	8
3.5	2.5	5.1	51281-0694	51281-0640	6
3.0	2.0	4.6	51281-0594	51281-0540	5
C	B	A	EMBOSSED TAPE ORDER No. オーダー番号	MATERIAL NO.	CIRCUIT



REVISED EC NO: J2008-4308 2008/06/27 DRWN:WABEI 2008/06/30 CHKD:THARUYAMA APPR:NUKITA	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
		10 UNDER	±0.2	DRAWN BY KENSUZUKI	DATE 2004/10/19	TITLE 0.5 FPC CONN NON-ZIF HSG ASSY (HGT=1.2MM) -LEAD FREE-	 MOLEX INCORPORATED	
		10 OVER 30 UNDER	±0.25	CHECKED BY NUKITA	DATE 2004/10/19			
		30 OVER	±0.3	APPROVED BY NUKITA	DATE 2004/10/19			
		ANGULAR ±3 °		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-51281-011		
	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				

F

E

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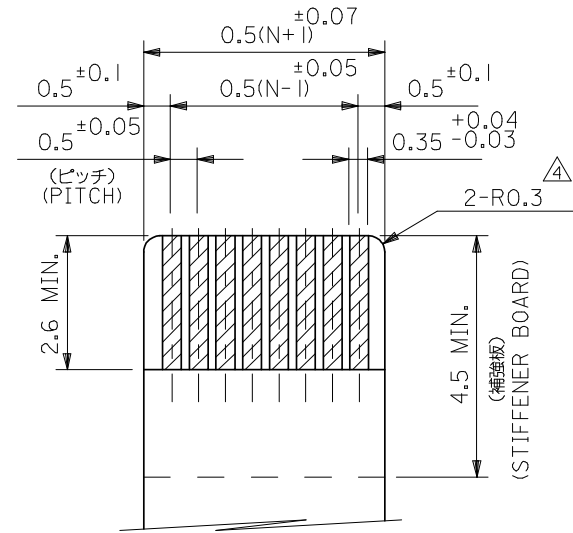
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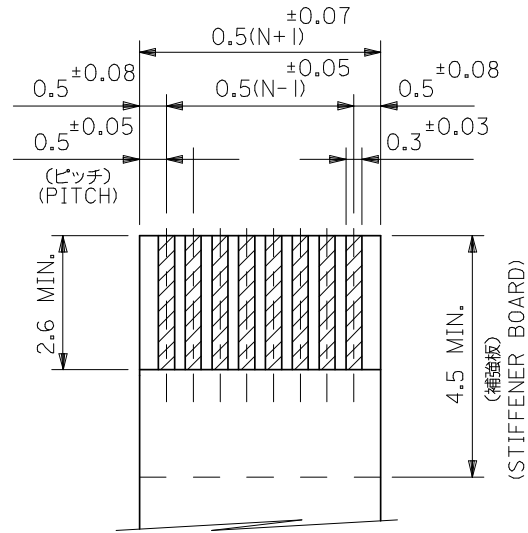
C

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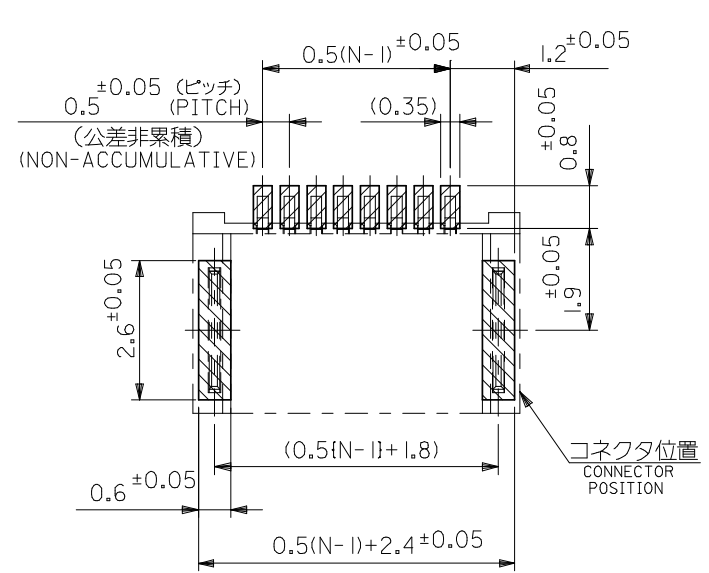
A



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)



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)



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

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
HOUSING : LIQUID CRYSTAL POLYMER (GLASS FILLED) UL94V-0
ターミナル : リン青銅 (t=0.2), ニッケル下地
TERMINAL : PHOSPHOR-BRONZE, CONTACT : GOLD
TAIL : TIN
OVER NICKEL PLATING
金具 : リン青銅 (t=0.25), ニッケル下地 純錫メッキ
FITTING NAIL : PHOSPHOR-BRONZE, PURE-TIN OVER NICKEL PLATING.
- △ ソルダータール半田付け面のズレ量、及び金具半田付け面のズレ量は、基準面 J に対し、
上方向 0.1 MAXIMUM 下方向 0.15 MAXIMUM とする。
又、相互のバラツキ量は 0.1 MAXIMUM とする。
MISALIGNMENT OF SOLDER TAILS AND FITTING NAILS FROM J
UPPER DIRECTION : 0.1 MAXIMUM, LOWER DIRECTION : 0.15 MAXIMUM.
OFFSET BETWEEN SOLDER TAILS AND FITTING NAILS : 0.1 MAXIMUM.
- △ 偶数極に適用。
TO BE APPLIED ONLY WHEN ALL CIRCUIT ARE EVEN.
- △ R0.3は、FPCの導体部にかからないこと。
R0.3 MUST NOT BE OVERLAPPED TO PATTERN OF FPC.

5. 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 35μm または 50μm
メッキ厚 0.1μm 金メッキ (電気メッキ)
を推奨いたします。
RECOMMENDED PUNCHER DIRECTION :
FROM CONDUCTOR SIDE TO STIFFENER BOARD SIDE.
RECOMMENDED CONDUCTOR SPEC :
THICKNESS OF SOFT COPPER FOIL : 35 μm or 50 μm
GOLD PLATING : 0.1 μm (ELECTRICAL PLATING)
6. 本製品は 51281-**-20 の鉛フリー品である。
THIS PRODUCT IS LEAD FREE OF 51281-**-20.
7. ソルダータールの平坦度は、0.1 MAXIMUM とする。
SOLDER TAIL COPLANARITY IS 0.1 MAXIMUM.

REVISED	EC NO: J2008-4308		2008/06/27		2008/06/30		2008/06/30		DESCRIPTION		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---		DESIGN UNITS METRIC		THIRD ANGLE PROJECTION	
	DRWN: WABEI		CHKD: THARYAMA		APPR: NUKITA						10 UNDER ±0.2		DRAWN BY KENSUZUKI		DATE 2004/10/19		TITLE 0.5 FPC CONN NON-ZIF HSG ASSY (HGT=1.2MM) -LEAD FREE-			
											10 OVER 30 UNDER ±0.25		CHECKED BY NUKITA		DATE 2004/10/19					
											30 OVER ±0.3		APPROVED BY NUKITA		DATE 2004/10/19		MOLEX MOLEX INCORPORATED			
											ANGULAR ±3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
											DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-51281-011		2 OF 2			
													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

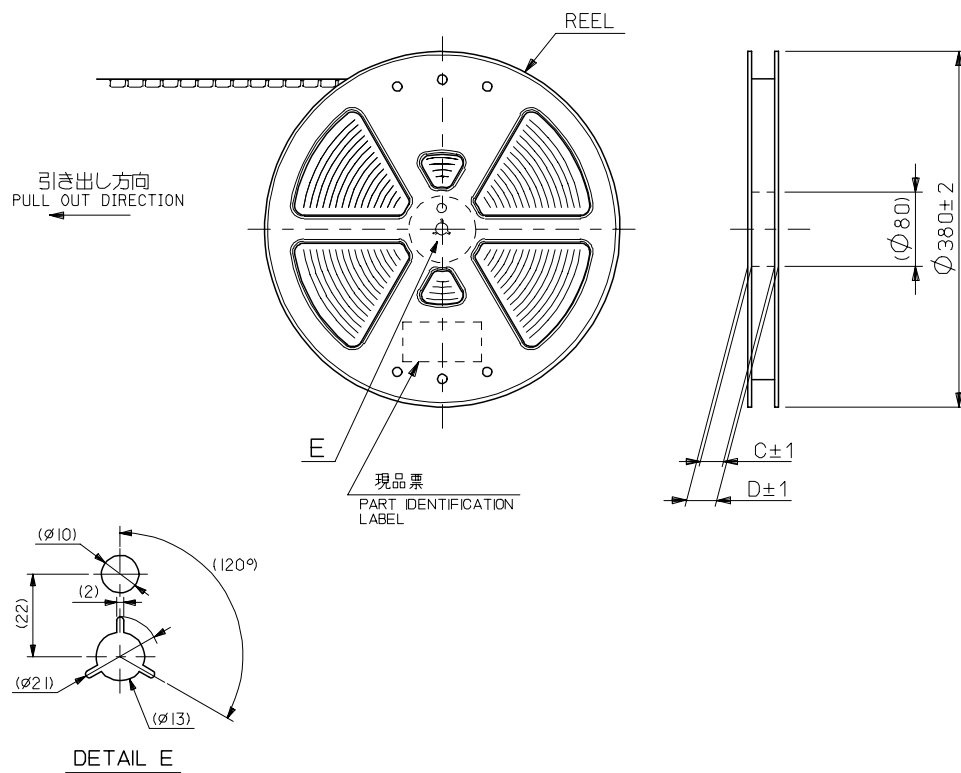
E

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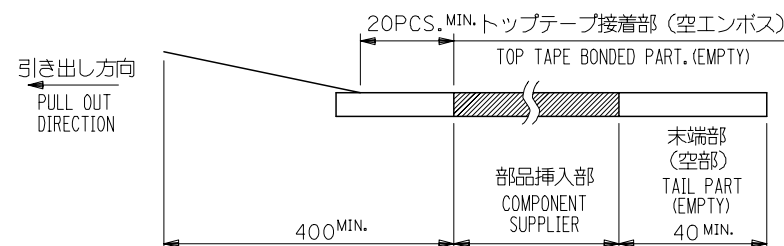
B

A

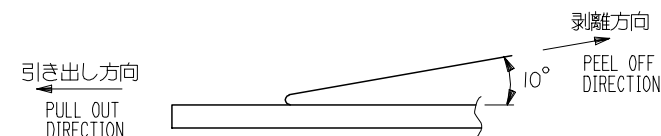


NOTES

- 製品詳細寸法については図面 SD-51281-011 を参照下さい。
RE DETAILED DIMENSION, SEE SD-51281-011
- 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

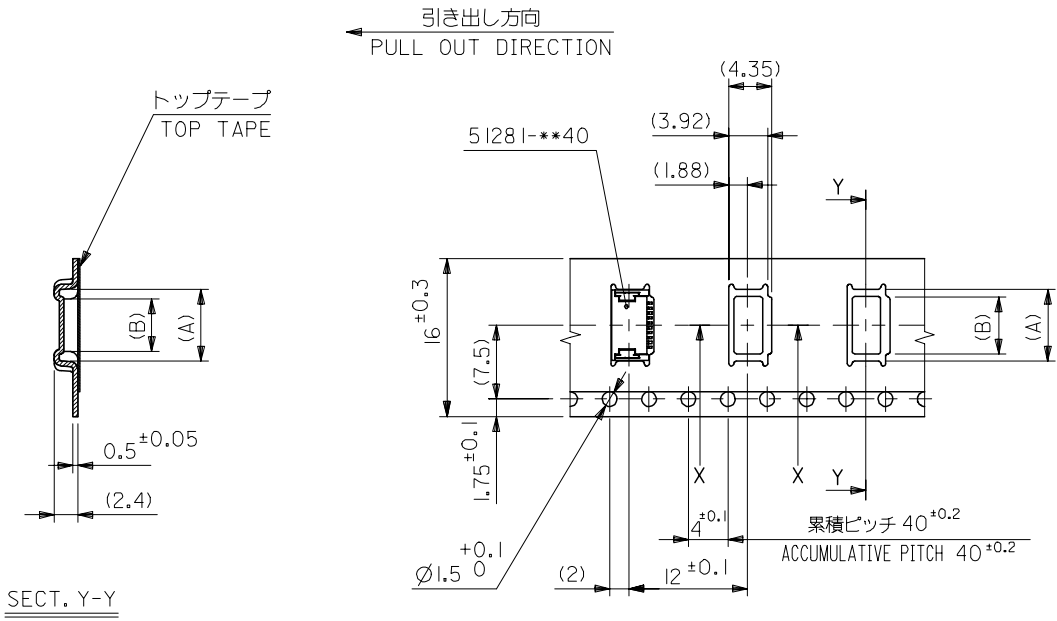


- トップテープの剥離強度：0.1N~1.3N {10gf~130gf}
(剥離方向は下図参照)
尚、本規格値は出荷時に適用。(但し、輸送時に剥離が発生しないこと。)
PEELING OFF FORCE OF TOP TAPE : 0.1N~1.3N {10gf~130gf}
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)
THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT.
PEEL OFF SHOULD NOT BE ALLOWED , DURING TRANSPORTATION.



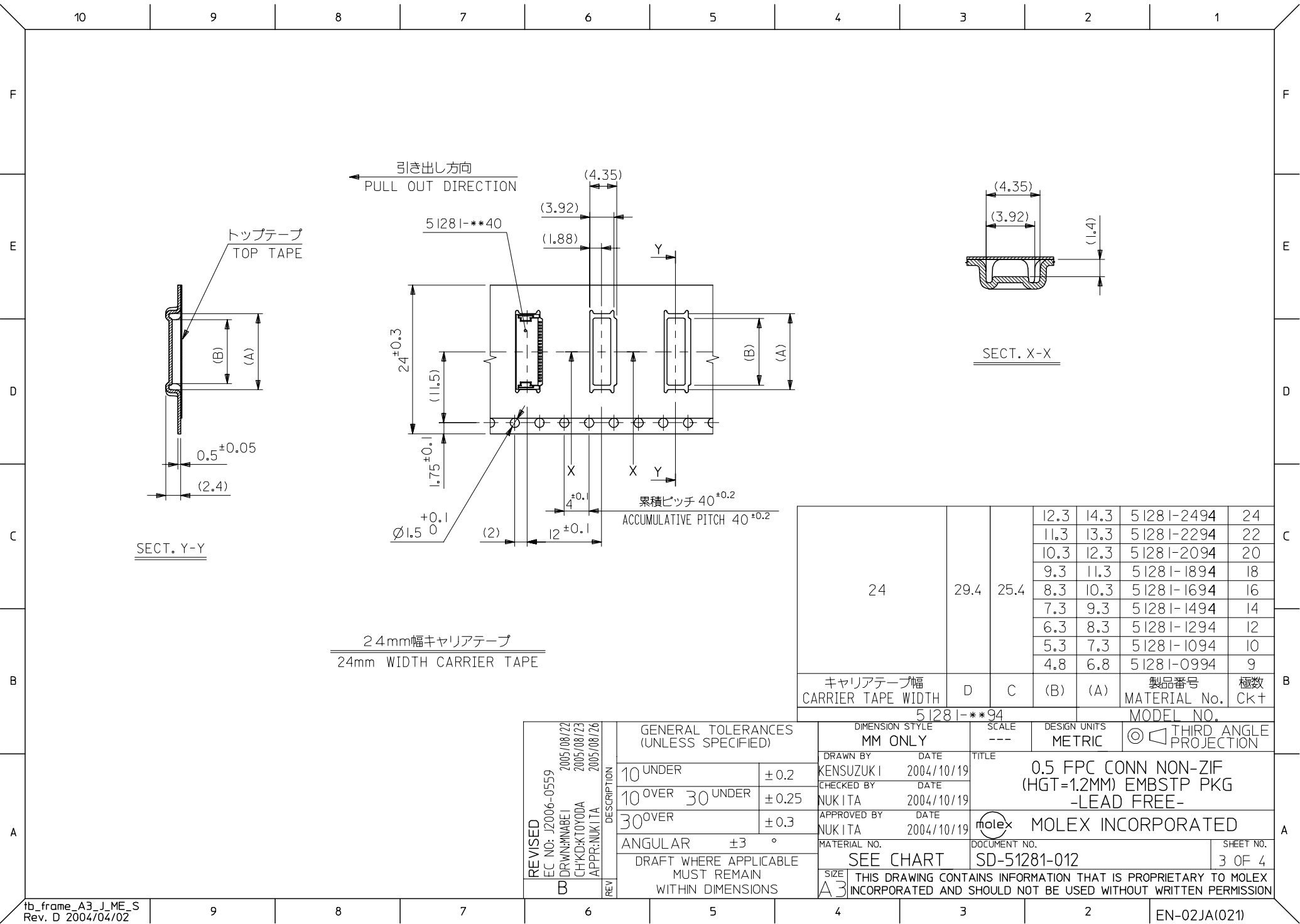
- 材料 (MATERIAL)
キャリアテープ (CARRIER TAPE) : ポリプロピレン (POLYPROPYLENE)
トップテープ (TOPTAPE) : PET , PE , PEF
リール (REEL) : ポリスチレン (PS) <リサイクル材含む>
POLYSTYREN (PS) <RECYCLE MATERIAL CONTAINED>
- C, D 寸法は SHEET 2 ~ 3 を参照下さい。
SEE SHEET 2 ~ 3 (DIMENSION C, D).

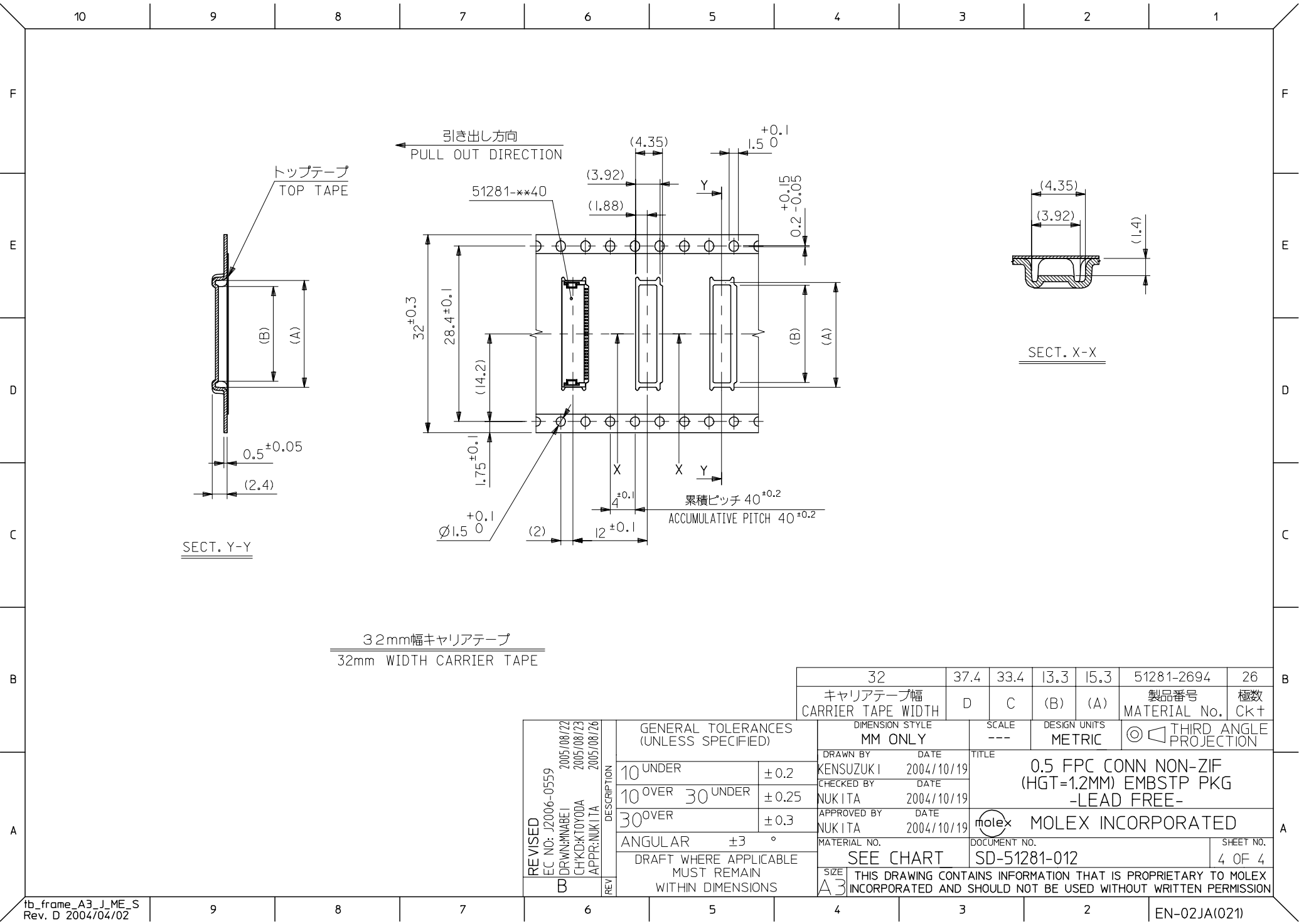
REVISED EC NO: J2006-0559 DRWN: NABEI CHKD: TOYODA APPR: NUKITA	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	
		10 UNDER	±0.2	DRAWN BY KENSUZUKI	DATE 2004/10/19	TITLE 0.5 FPC CONN NON-ZIF (HGT=1.2MM) EMBSTP PKG -LEAD FREE-	MOLEX INCORPORATED	SHEET NO. 1 OF 4	
		10 OVER 30 UNDER	±0.25	CHECKED BY NUKITA	DATE 2004/10/19				
		30 OVER	±0.3	APPROVED BY NUKITA	DATE 2004/10/19				
		ANGULAR ±3 °		MATERIAL NO.		DOCUMENT NO.			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-51281-012			
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



16	21.4	17.4	4.3	6.3	51281-0894	8
			3.3	5.3	51281-0694	6
			2.8	4.8	51281-0594	5
キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	製品番号 MATERIAL No.	極数 CK+
51281-**-94				MODEL NO.		

REVISED EC NO: J2006-0559 DRWN: MWABEI CHKD: KTOYODA APPR: NUKITA B	DESCRIPTION 2005/08/22 2005/08/23 2005/08/26	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	± 0.2	DRAWN BY KENSUZUK	DATE 2004/10/19	TITLE 0.5 FPC CONN NON-ZIF (HGT=1.2MM) EMBSTP PKG -LEAD FREE-				
		10 OVER 30 UNDER	± 0.25	CHECKED BY NUKITA	DATE 2004/10/19					
		30 OVER	± 0.3	APPROVED BY NUKITA	DATE 2004/10/19	MOLEX INCORPORATED				
		ANGULAR	±3 °	MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-51281-012		2 OF 4		
		REV		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					





REVISED EC NO: J2006-0559 DRWN: NABEI CHKD: TOYODA APPR: NUKITA B	DESCRIPTION REV 2005/08/22 2005/08/23 2005/08/26	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		10 UNDER	± 0.2	DRAWN BY KENSUZUKI	DATE 2004/10/19	TITLE 0.5 FPC CONN NON-ZIF (HGT=1.2MM) EMBSTP PKG -LEAD FREE-				
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		30 OVER	± 0.3	APPROVED BY NUKITA	DATE 2004/10/19	MOLEX INCORPORATED				
		ANGULAR ±3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		SD-51281-012		4 OF 4		
				SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					