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Part Number:

0512810594

Status:

Active

Overview:

Description:

0.50mm (.020") Pitch FFC/FPC Connector, SMT, Right Angle, Non-ZIF, Dual Contact Style, 1.20mm (.047") Mated Height, 5 Circuits, Lead-free, Gold (Au) Plating

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

51281Series

General

Product Family	FFC/FPC Connectors
Series	51281
Overview	ffc_fpc_smt
Product Name	N/A
Physical	
Circuits (Loaded)	5
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

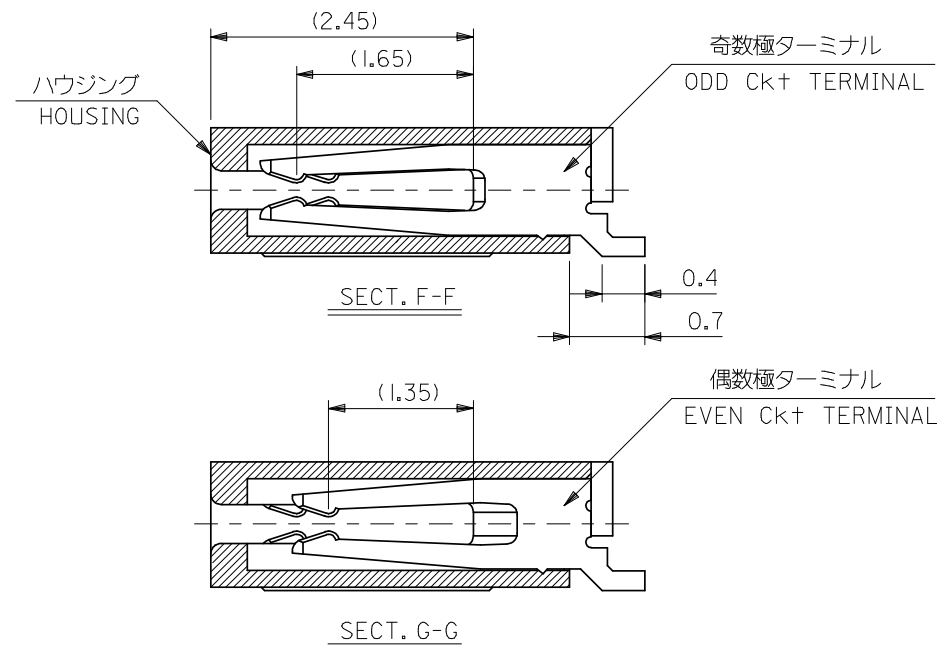
Material Info

Reference - Drawing Numbers

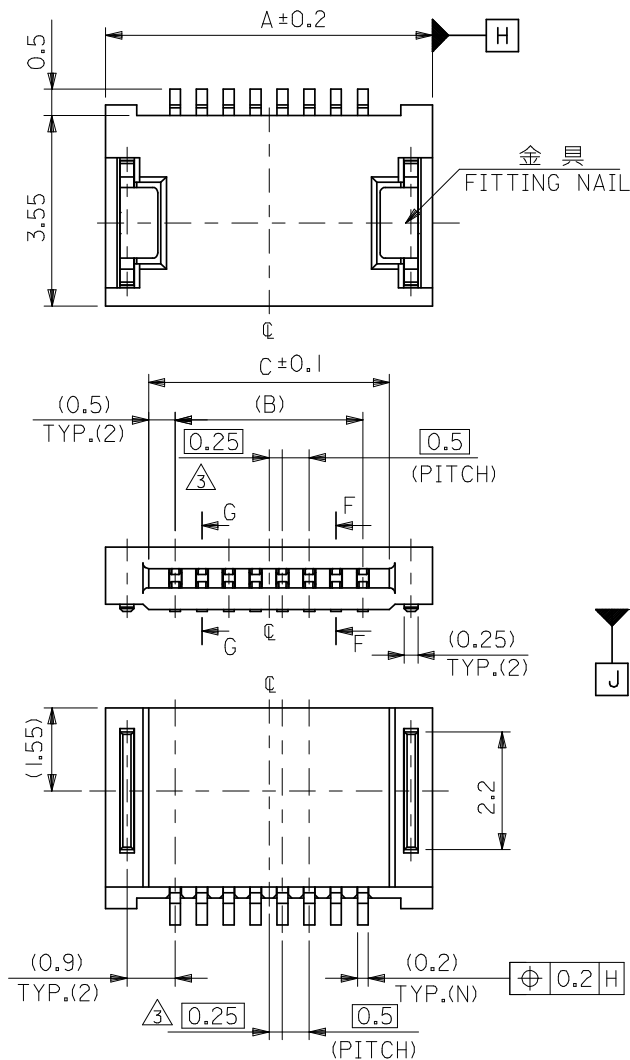
Packaging Specification	SPK-51281-001
Product Specification	PS-51281-003, RPS-51281-012, RPS-51281-015, RPS-51281-016, RPS-51281-017, RPS-51281-018, RPS-51281-019
Sales Drawing	SD-51281-011, SD-51281-012

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 ---	51281-xx40 METRIC	MODEL NO. 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-		
		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. SEE TABLE				
	G	REV	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

D

C

B

A

F

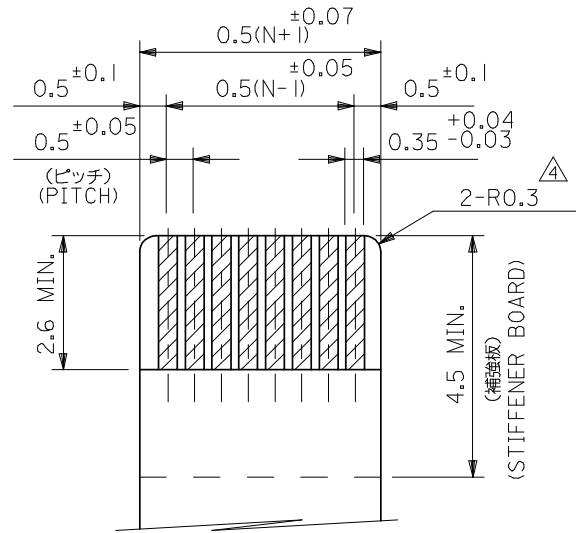
E

D

C

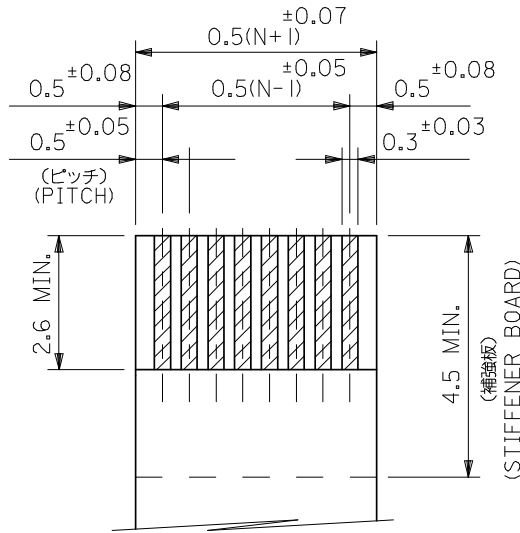
B

A



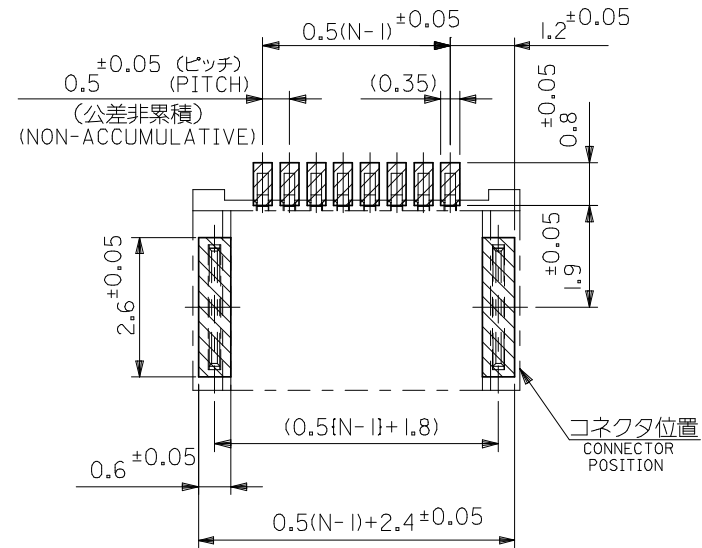
適合FPC推奨寸法
APPLICABLE FPC
RECOMMENDED DIMENSION

(仕上がり厚さ: 0.3 ±0.03)
(THICKNESS: 0.3 ±0.03)



適合FFC推奨寸法
APPLICABLE FFC
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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

CONTACT部: 金メッキ
テール部: 錫メッキ

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)

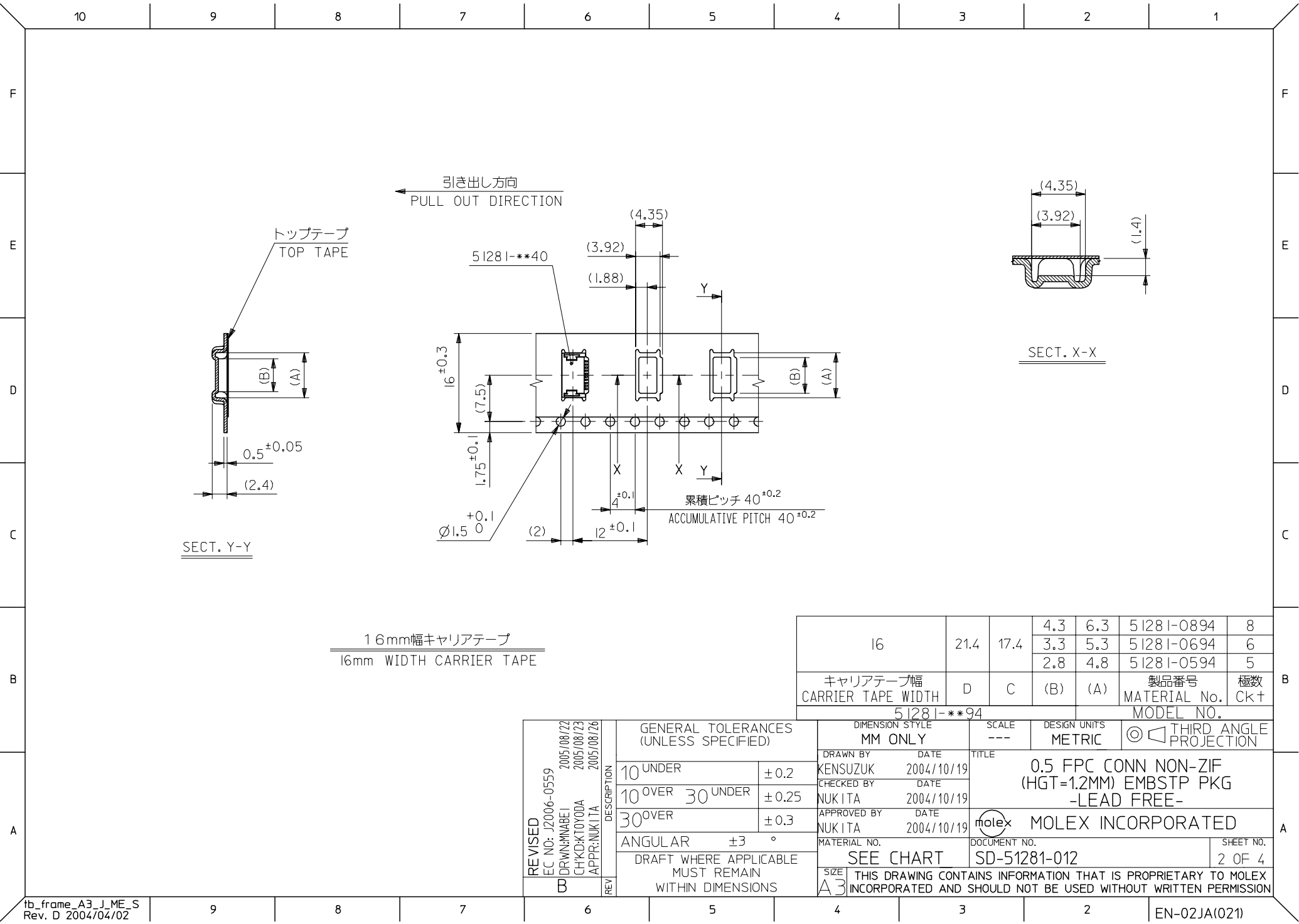
6. 本製品は51281-**-20の鉛フリー品である。

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.

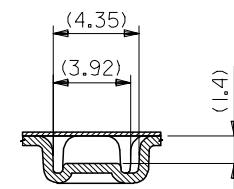
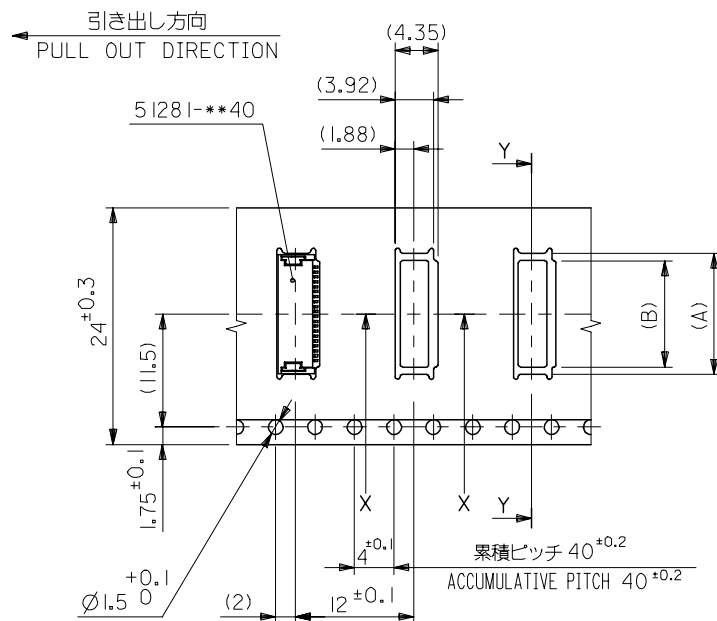
REVISED EC NO: J2008-4308 DRAWN: NABEI CHKD: THARUYAMA APPR: NUKITA		DESCRIPTION 2008/06/27 2008/06/30 2008/06/30	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS		THIRD ANGLE	
					MM ONLY		---	METRIC	PROJECTION		
G	REV		10 UNDER	± 0.2	DRAWN BY	DATE	TITLE 0.5 FPC CONN NON-ZIF HSG ASSY (HGT=1.2MM) -LEAD FREE-				
			10 OVER 30 UNDER	± 0.25	CHECKED BY	DATE					
			30 OVER	± 0.3	APPROVED BY	DATE	MOLEX MOLEX INCORPORATED				
			ANGULAR ± 3 °		NUKITA	2004/10/19					
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.						
SEE SHEET 1		SD-51281-011				2 OF 2					
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								



16mm幅キャリアテープ
16mm WIDTH CARRIER TAPE

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	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 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		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

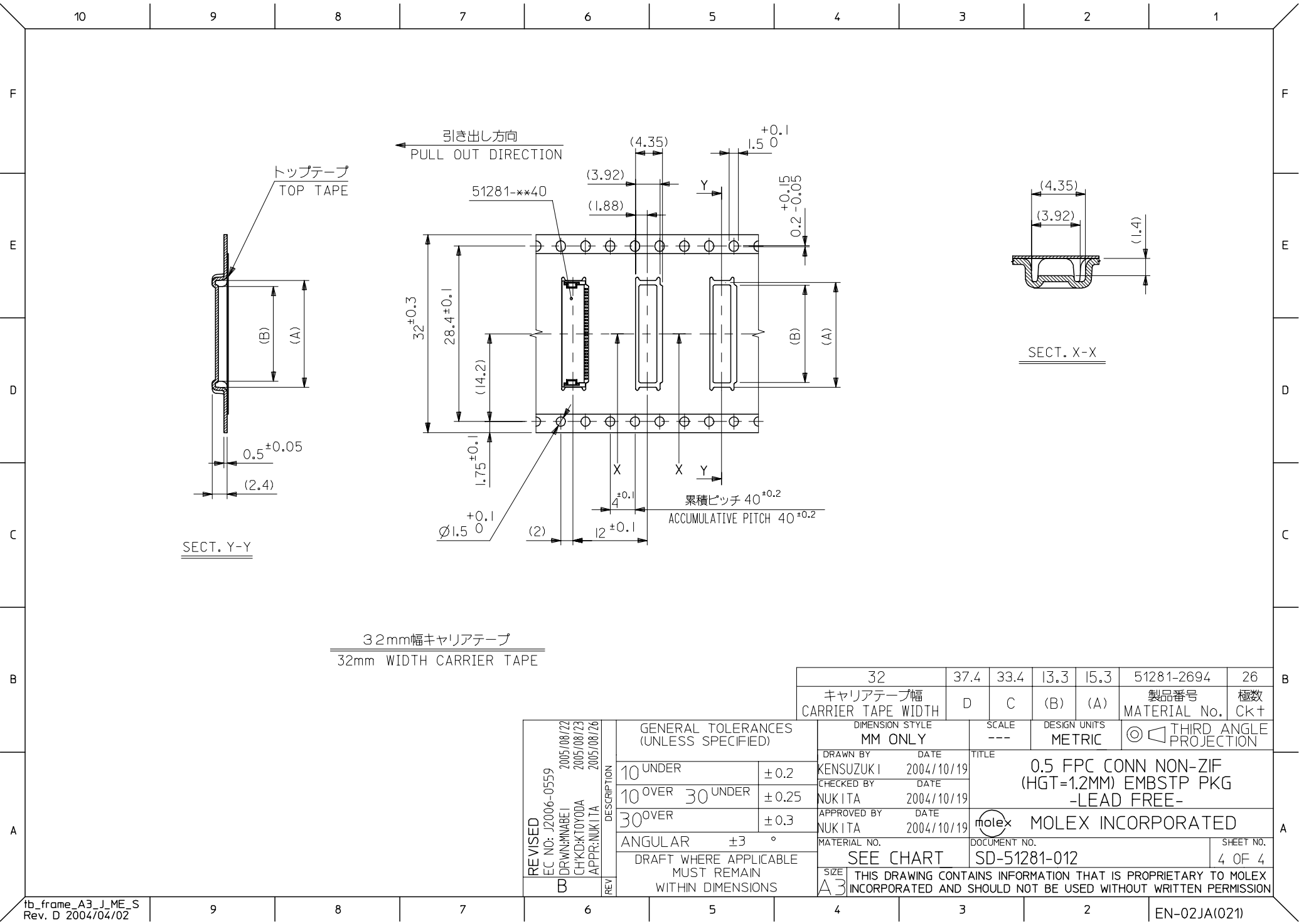


SECT. X-X

24mm幅キャリアテープ

24	29.4	25.4	12.3	14.3	51281-2494	24
			11.3	13.3	51281-2294	22
			10.3	12.3	51281-2094	20
			9.3	11.3	51281-1894	18
			8.3	10.3	51281-1694	16
			7.3	9.3	51281-1494	14
			6.3	8.3	51281-1294	12
			5.3	7.3	51281-1094	10
			4.8	6.8	51281-0994	9
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	2005/08/22	DRAWN: NABEI	2005/08/23	CHK: KDK TOYODA	2005/08/26	APPR: NUKITA	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	MODEL NO. 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-			
									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		3 OF 4	
	B						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-				
		10 OVER 30 UNDER	± 0.25	CHECKED BY NUKITA	DATE 2004/10/19					
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		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					

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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