

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0512810894

Status:

Active

Overview:

Description:

0.50mm (.020") Pitch FFC/FPC Connector, SMT, Right Angle, Non-ZIF, Dual Contact Style, 1.20mm (.047") Mated Height, 8 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)	8
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-51281-015, 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](#)

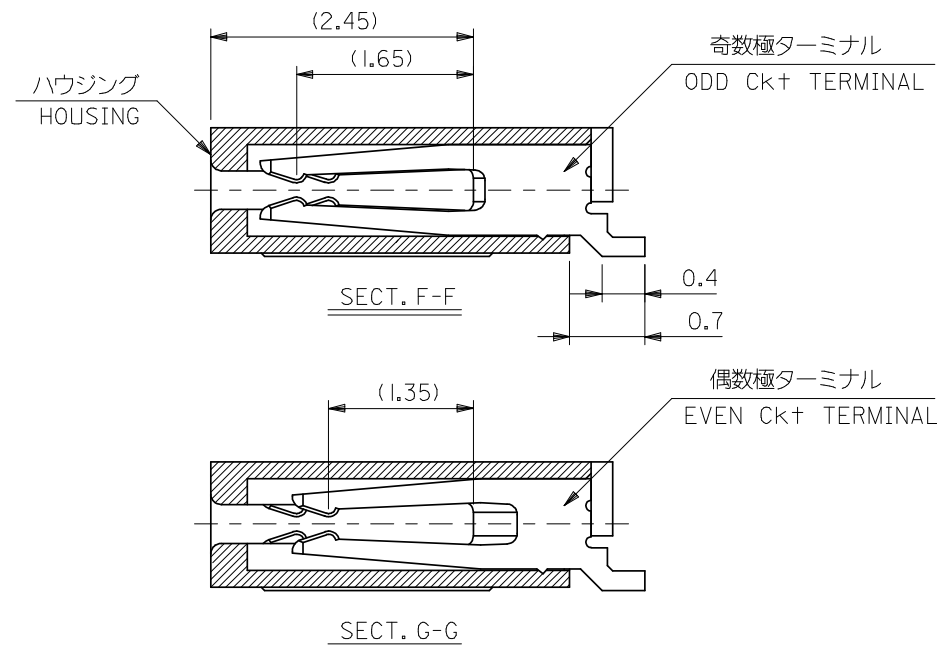
Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series

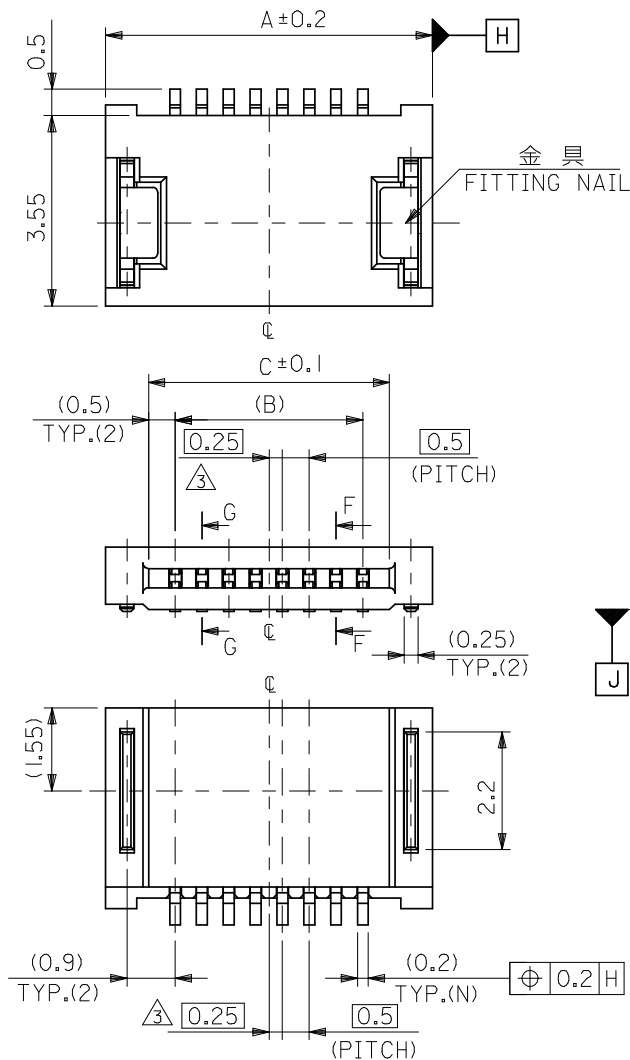
51281Series

This document was generated on 06/04/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



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	SHEET NO. 1 OF 2	
		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

D

C

B

A

F

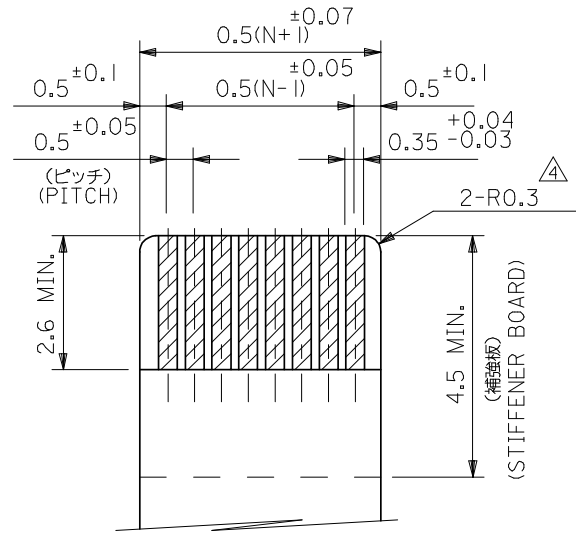
E

D

C

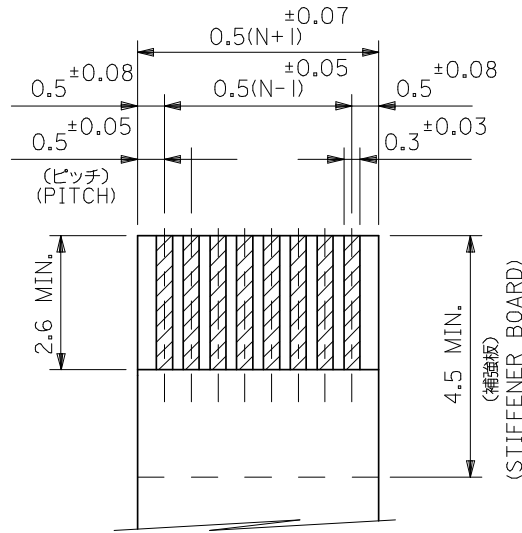
B

A



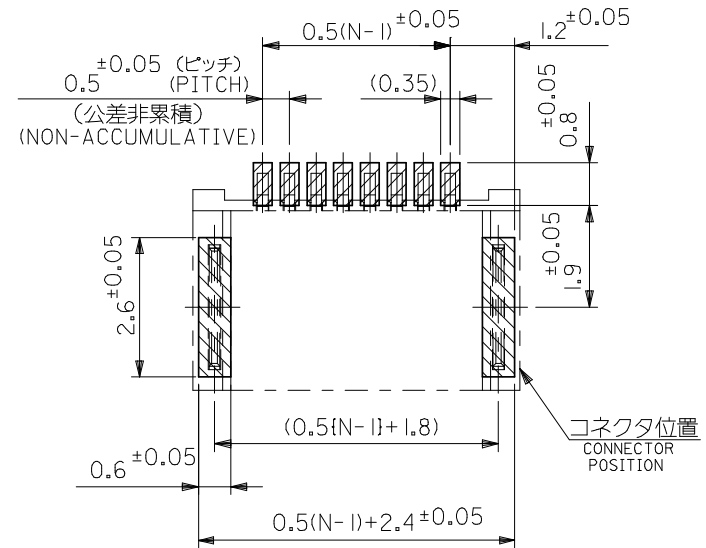
適合FPC推奨寸法
APPLICABLE FPC
RECOMMENDED DIMENSION

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



適合FFC推奨寸法
APPLICABLE FFC
RECOMMENDED DIMENSION

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



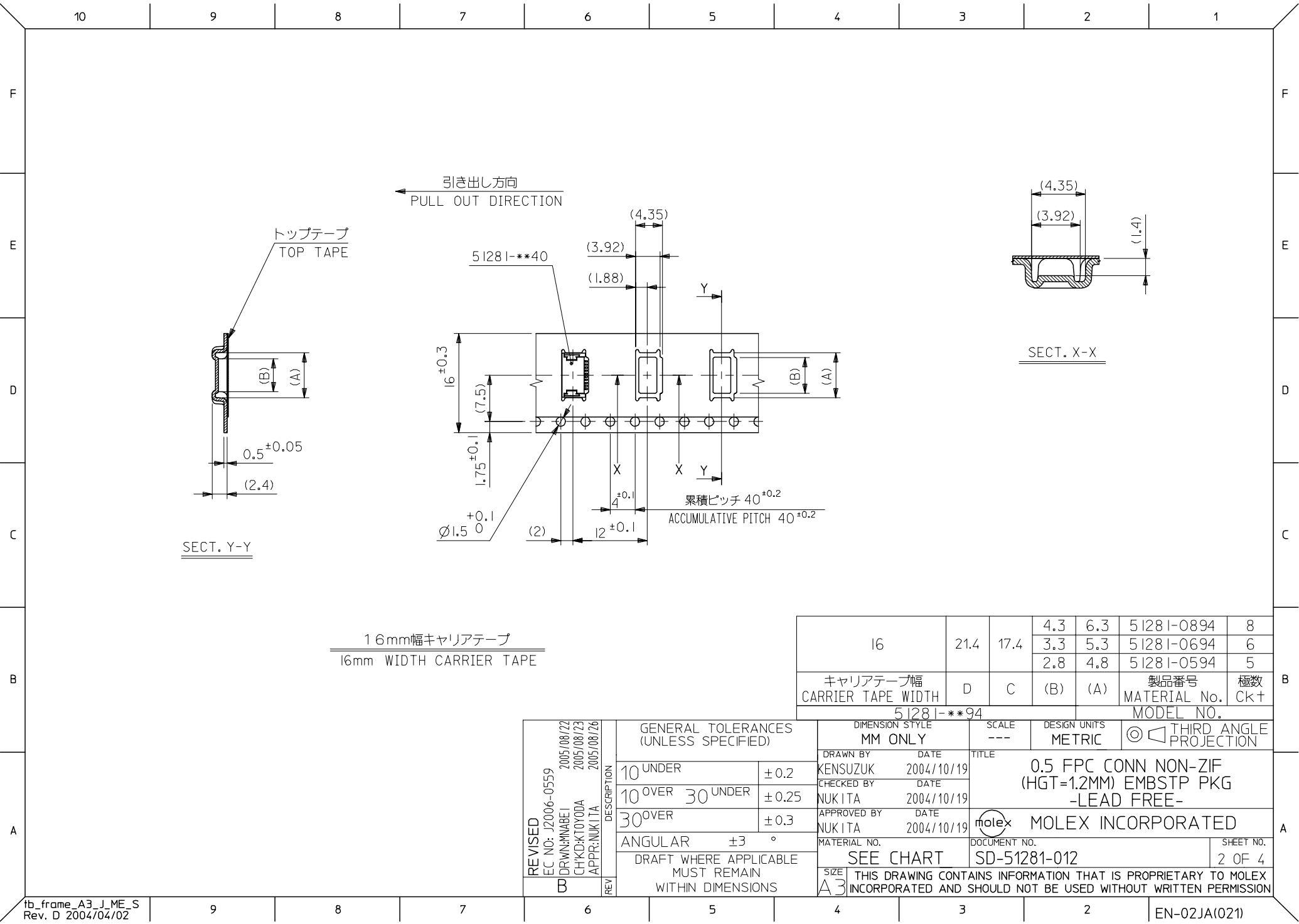
参考基板レイアウト図
RECOMMENDED P.C. BOARD LAYOUT
(マウント面)
(MOUNTING SIDE)

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
CONTACT部: 金メッキ
TAIL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.

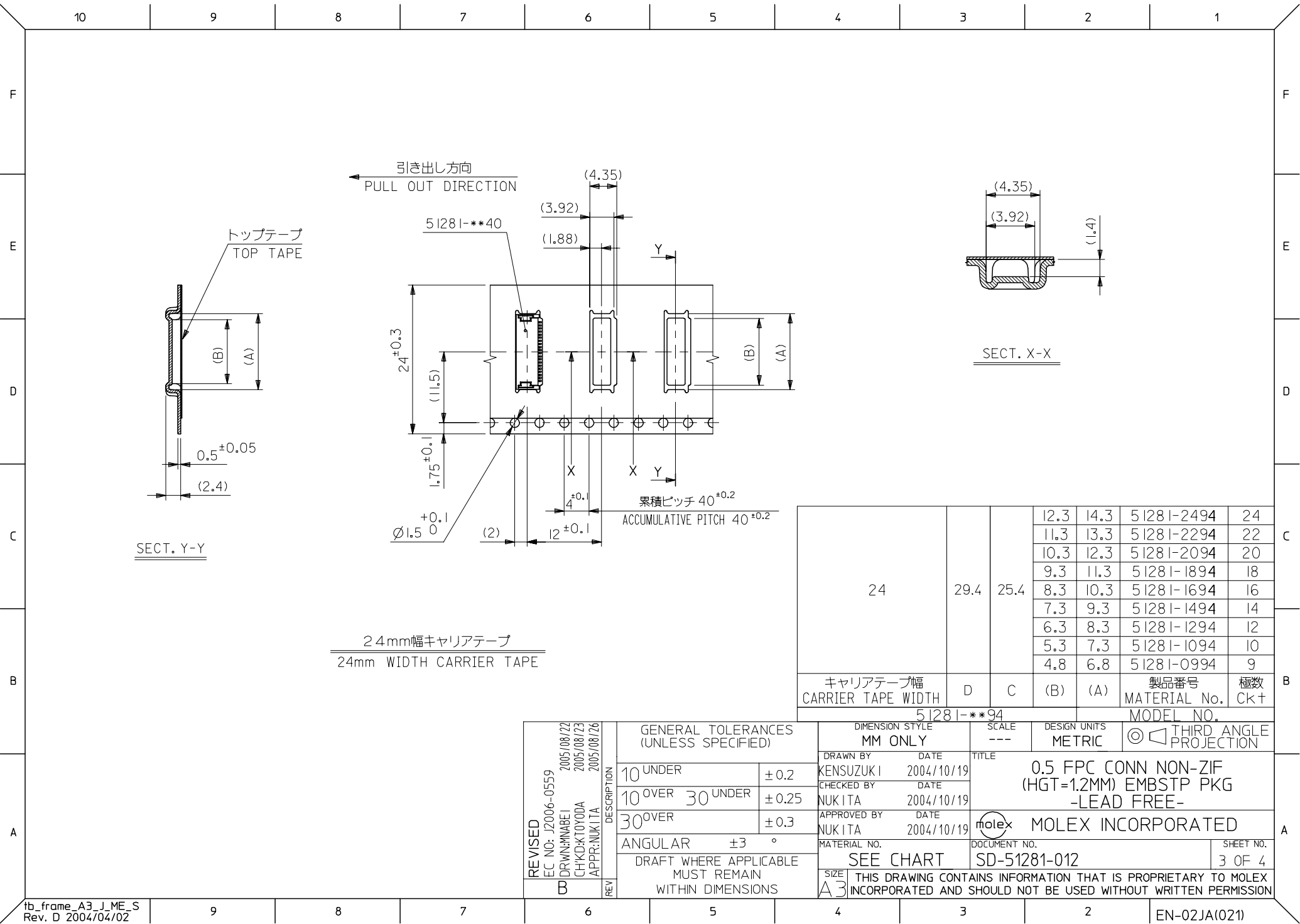
REVISED		EC NO: J2008-4308	2008/06/27	DRWN: WABEI	2008/06/30	CHKD: THARUYAMA	2008/06/30	APPR: NUKITA	2008/06/30	DESCRIPTION	
GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		51281-**-40		MODEL NO.		DESIGN UNITS	
10 UNDER		±0.2		MM ONLY		---		METRIC		THIRD ANGLE PROJECTION	
10 OVER 30 UNDER		±0.25		DRAWN BY DATE		KENSUZUKI 2004/10/19		TITLE		0.5 FPC CONN NON-ZIF	
30 OVER		±0.3		CHECKED BY DATE		NUKITA 2004/10/19		HSG ASSY (HGT=1.2MM)		-LEAD FREE-	
ANGULAR ±3 °		APPROVED BY DATE		NUKITA 2004/10/19		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-51281-011		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		2 OF 2			

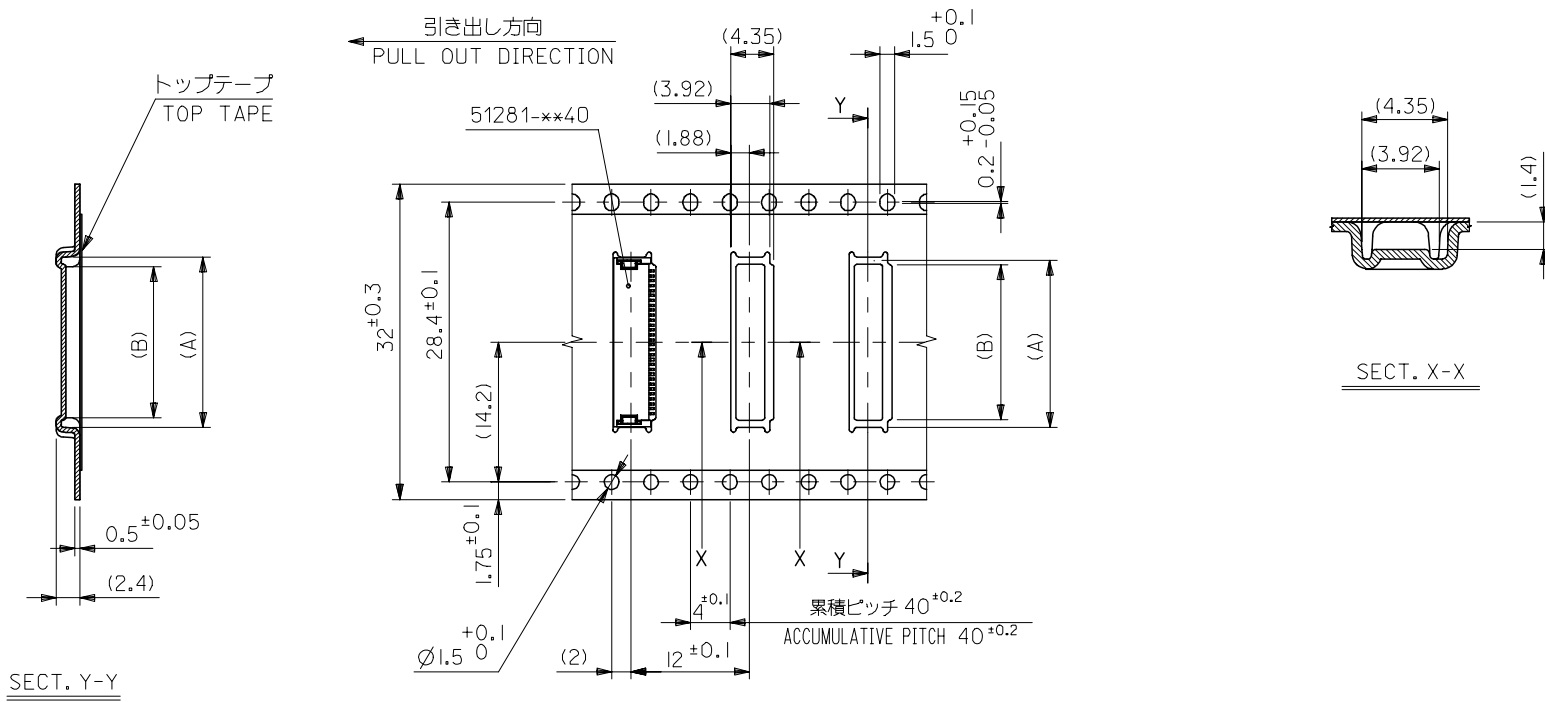


16mm幅キャリアテープ
16mm WIDTH CARRIER TAPE

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





32mm幅キャリアテープ
32mm WIDTH CARRIER TAPE

	32	37.4	33.4	13.3	15.3	51281-2694	26
	キャリアテープ幅 CARRIER TAPE WIDTH	D	C	(B)	(A)	製品番号 MATERIAL No.	極数 CK+
S	DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC		◎ 第三角投影 THIRD ANGLE PROJECTION	
	DRAWN BY KENSUZUKI	DATE 2004/10/19	TITLE 0.5 FPC CONN NON-ZIF (HGT=1.2MM) EMBSTP PKG -LEAD FREE-				
2	CHECKED BY NUKITA	DATE 2004/10/19					
25	APPROVED BY NUKITA		MOLEX INCORPORATED				
3	DATE 2004/10/19						
	MATERIAL NO.		DOCUMENT NO.				SHEET NO.
E	SEE CHART		SD-51281-012				4 OF 4
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						