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**Part Number:** [0527451097](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 0.50mm (.020") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Top Contact Style, 10 Circuits, Lead-free, Gold (Au) Contact Plating, High Barrier Packaging

**Agency Certification**

UL E29179

**General**

Product Family FFC/FPC Connectors  
 Series 52745  
 Overview ffc\_fpc\_smt  
 Product Name N/A

**Physical**

Circuits (Loaded) 10  
 Color - Resin Black, White  
 Contact Position Top  
 Durability (mating cycles max) 20  
 Entry Angle 90° Angle  
 Flammability 94V-0  
 Mated Height (in) 0.079 In  
 Mated Height (mm) 2.00 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Gold  
 Number of Rows 1  
 Orientation Right Angle  
 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  
 Polarized to PCB Yes  
 Stackable No  
 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**

Application Specification AS-52745-001  
 Packaging Specification SPK-52745-001, SPK-52745-002  
 Product Specification PS-52745-051, RPS-52745-056, RPS-52745-060, RPS-52745-061, RPS-52745-062, RPS-52745-063, RPS-52745-064, RPS-52745-065, RPS-52745-066, RPS-52745-068, RPS-52745-071, RPS-52745-072, RPS-52745-074, RPS-52745-075, RPS-52745-077  
 Sales Drawing SD-52745-050, SD-52745-051

**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](mailto: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**  
[52745Series](#)

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注記 NOTES

1. 使用材料 MATERIAL

ハウジング : ポリアミド46、ガラス充填、UL94V-0 (白)  
 HOUSING : POLYAMIDE46, GLASS FILLED, UL94V-0(WHITE)  
 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=0.2)  
 TERMINAL : PHOSPOR BRONZE  
 メッキ  
 コントクト部: 金メッキ 0.1マイクロメートル以上  
 テール部: 金メッキ 0.05マイクロメートル以上  
 下地: ニッケル 1.0マイクロメートル以上

PLATED  
 CONTACT AREA : GOLD 0.1 MICROMETER MINIMUM  
 TAIL AREA : GOLD 0.05 MICROMETER MINIMUM  
 UNDER PLATING : NICKEL 1.0 MICROMETER MINIMUM  
 金具 : リン青銅、ニッケル下地純銅メッキ (t=0.2)  
 FITTING NAIL : PHOSPOR BRONZE, TIN OVER NICKEL PLATING

2. エンボステープ梱包時は、アクチュエータがロックした状態とする。  
 IN THE PACKAGE, ACTUATOR OF PART NO. 52745-\*\*\*59 SHOULD BE LOCKED.  
 △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 H に対し上方向 0.1 MAX.、下方向 0.15 MAX. とする。  
 MISALIGNMENT OF SOLDER TAILS AND FITTING NAILS FROM H  
 UPPER DIRECTION: 0.1 MAX., LOWER DIRECTION: 0.15 MAX.

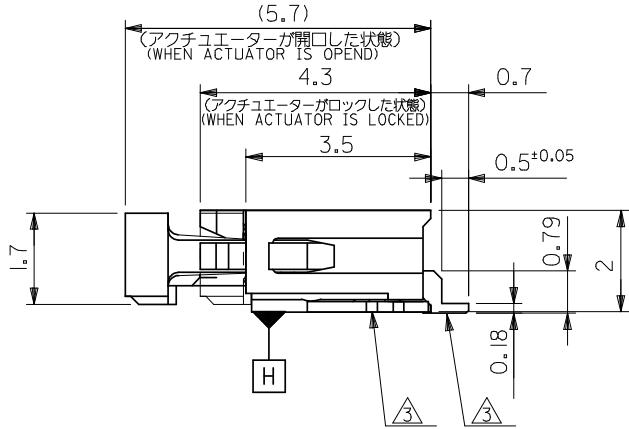
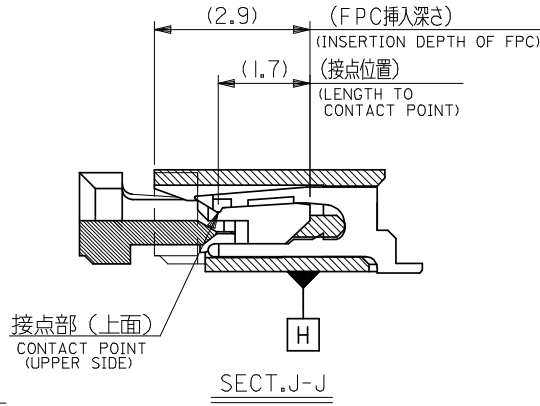
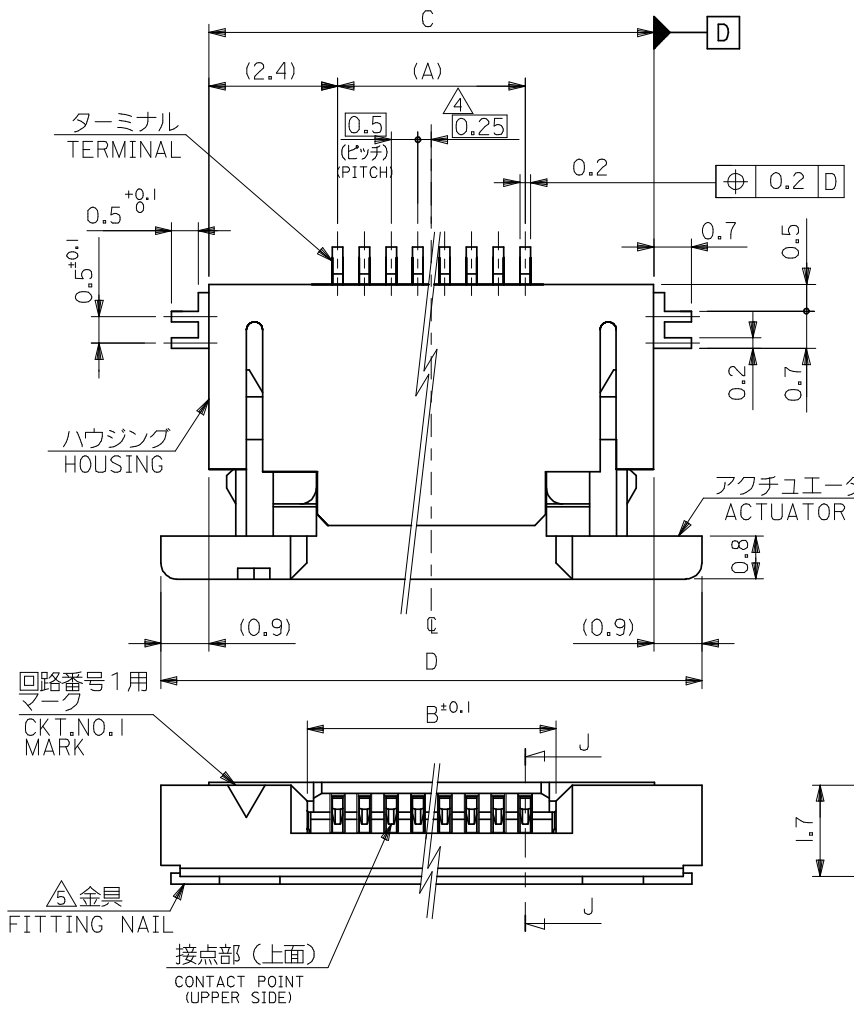
△偶数極に適用。  
 APPLY FOR EVEN CIRCUIT.

△パターンはくり止め用金具  
 FITTING NAIL FOR PREVENTION OF PEELING  
 OF P.C.B. PATTERN.

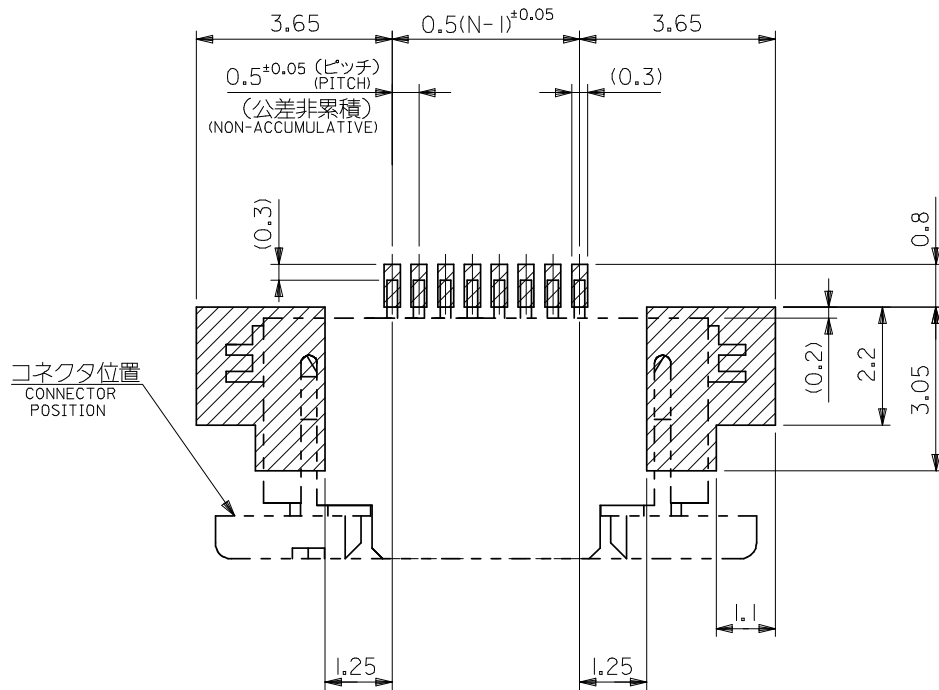
6. 本製品は 54745-\*\*\*17 の部分金メッキ品である。  
 THIS PRODUCT IS SELECTIVE GOLD PLATING OF 52745-\*\*\*17.

16.1	14.3	10.65	9.5	52745-2097	52745-2059	20
15.6	13.8	10.15	9.0	-1997	-1959	19
15.1	13.3	9.65	8.5	-1897	-1859	18
14.6	12.8	9.15	8.0	-1797	-1759	17
14.1	12.3	8.65	7.5	-1697	-1659	16
13.6	11.8	8.15	7.0	-1597	-1559	15
13.1	11.3	7.65	6.5	-1497	-1459	14
12.6	10.8	7.15	6.0	-1397	-1359	13
12.1	10.3	6.65	5.5	-1297	-1259	12
11.6	9.8	6.15	5.0	-1197	-1159	11
11.1	9.3	5.65	4.5	-1097	-1059	10
10.6	8.8	5.15	4.0	-0997	-0959	9
10.1	8.3	4.65	3.5	-0897	-0859	8
9.6	7.8	4.15	3.0	-0797	-0759	7
9.1	7.3	3.65	2.5	-0697	-0659	6
8.1	6.3	2.65	1.5	52745-0497	52745-0459	4
D	C	B	(A)	EMBOSSED TAPE	MATERIAL NO.	極数
				ORDER No. オーダー番		CIRCUIT

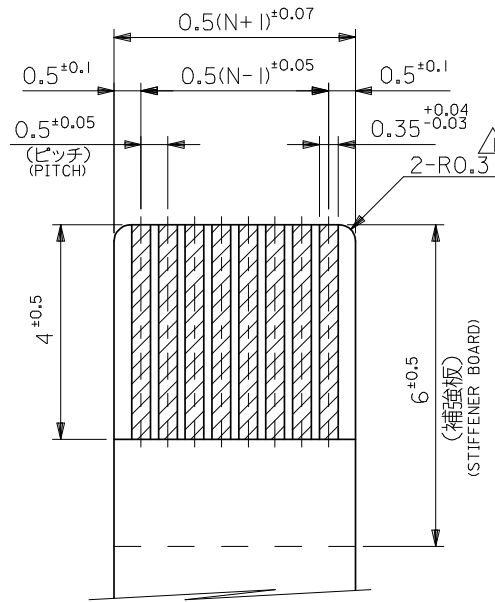
52745-\*\*\*59 MODEL NO.



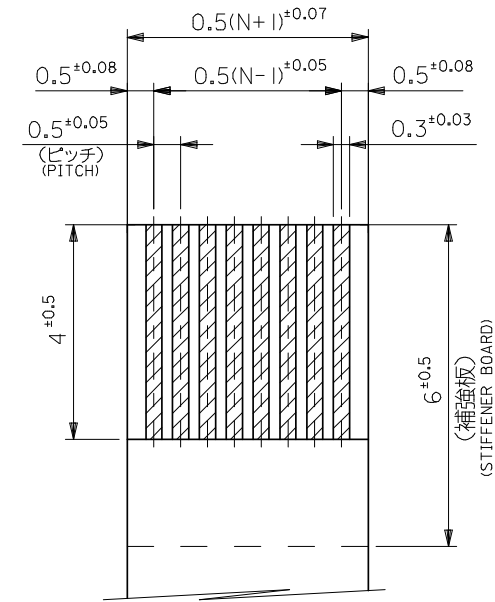
REVISED EC NO: J2008-4308 DRWN: MABEI 2008/06/27 CH'KD: THARUYAMA 2008/06/30 APPR: NUKITA 2008/06/30	DESCRIPTION GENERAL TOLERANCES (UNLESS SPECIFIED) 10 UNDER ±0.2 10 OVER 30 UNDER ±0.25 30 OVER ±0.3 ANGULAR ±3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		DRAWN BY M. NABEI	DATE '05/02/14	TITLE 0.5 FPC CONN ASSY ZIF UPR CONT -LEAD FREE-				
		CHECKED BY K. TOJO	DATE '05/02/14					
		APPROVED BY N. UKITA	DATE '05/02/14	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-52745-050	SHEET NO. 1 OF 2	
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				



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



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)

FPCについて:

打抜き方向は導体側から補強板側を推奨致します。  
補強フィルム材質はポリイミドを推奨致します。  
接着剤は熱硬化接着剤を推奨致します。

ABOUT FPC:

RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER BOARD.  
RECOMMENDED MATERIAL :  
STIFFENER FILM : POLYIMIDE  
BONDING AGENT : THERMOSETTING BONDING AGENT

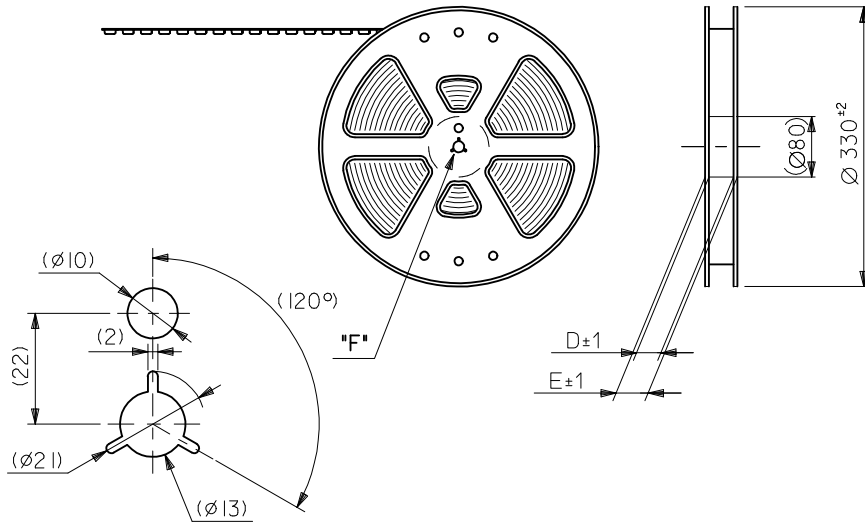
注記 NOTES

△ 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.

52745-\*\*\*59 MODEL NO.

REVISED EC NO: J2008-4308 DRWN: NABEI 2008/06/27 CHKD: THARUYAMA 2008/06/30 APPR: NUKITA 2008/06/30	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY M. NABEI	DATE '05/02/14	TITLE 0.5 FPC CONN ASSY ZIF UPR CONT -LEAD FREE-			
	10 OVER 30 UNDER	±0.25	CHECKED BY K. TOJO	DATE '05/02/14				
	30 OVER	±0.3	APPROVED BY N. UKITA	DATE '05/02/14	MOLEX INCORPORATED			
	ANGULAR	±3 °	MATERIAL NO.	DOCUMENT NO.				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-52745-050				

引き出し方向  
←  
PULL OUT  
DIRECTION



DETAIL "F"

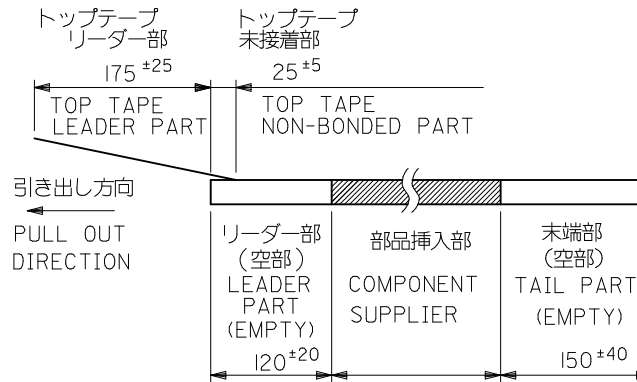
5. 材料 キャリアテープ:ポリプロピレン (PP)  
 トップテープ:PET, PE, PEF  
 リール:ポリスチレン (PS) <リサイクル材を含む>  
 MATERIAL CARRIER TAPE:POLYPROPYLENE  
 TOP TAPE:PET,PE,PEF  
 REEL:POLYSTYRENE(PS)  
 <RECYCLE MATERIAL CONTAINED>

6. 本製品は 52745- \*\*90 の鉛フリー品である。  
 THIS PRODUCT IS LEAD FREE OF 52745-\*\*90

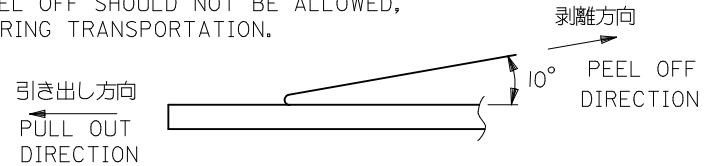
7. 本製品は乾燥剤入り、ハイバリア梱包仕様である。  
 THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.

注記 NOTES

- 製品番号 52745-\*\*59 の梱包状態はアクチュエータがロックした状態とする。  
 詳細寸法については図面 SD-52745-050 を参照下さい。  
 IN THE PACKAGE,ACTUATOR OF PART NO.52745-\*\*59 SHOULD BE LOCKED RE DETAILED DIMENSIONS,SEE SD-52745-050.
- 梱包数量:1000個/リール  
 NUMBER OF CONNECTORS:1000PCS/REEL
- リードテープ長さ LEAD TAPE LENGTH

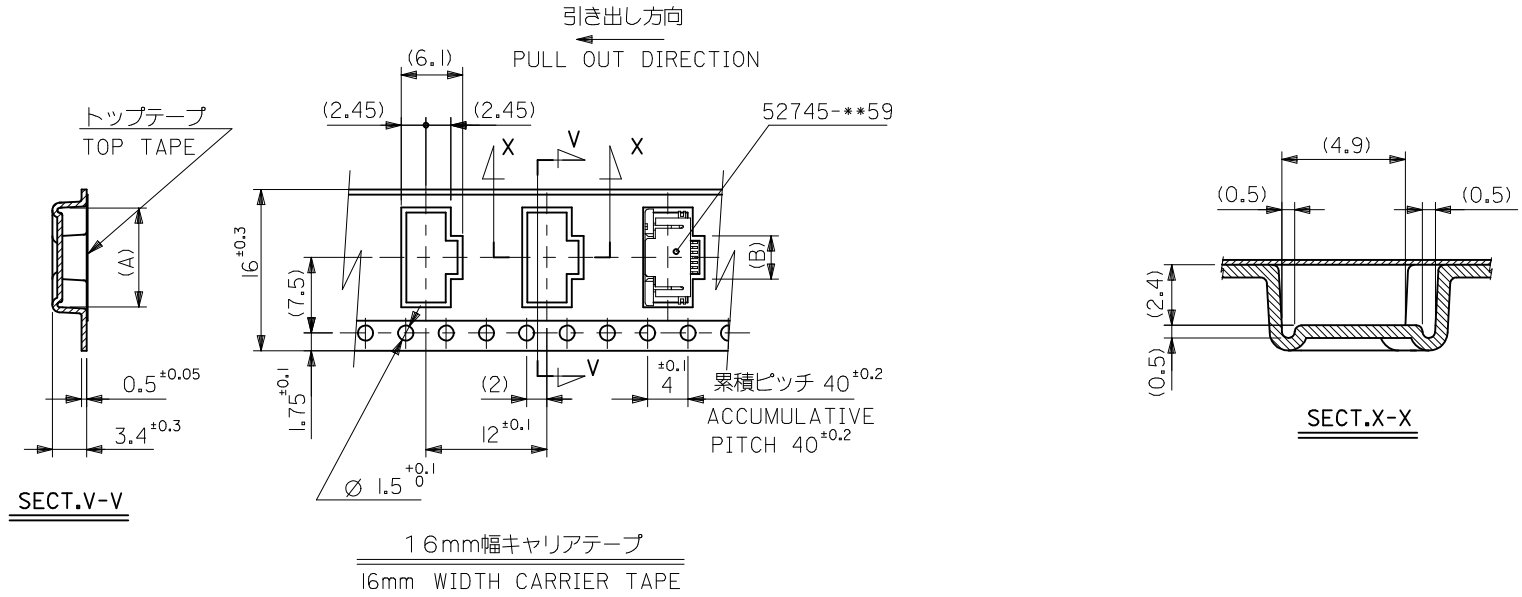


- トップテープの剥離強度:(剥離方向は下図参照)  
 0.1N~1.3N(10gf~130gf)尚、本規格値は、出荷時に適用。  
 (但し、輸送時に剥離が発生しない事。)  
 PEELING OFF FORCE OF TOP TAPE:  
 0.1N~1.3N(10gf~130gf)(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
 THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT  
 PEEL OFF SHOULD NOT BE ALLOWED,  
 DURING TRANSPORTATION.



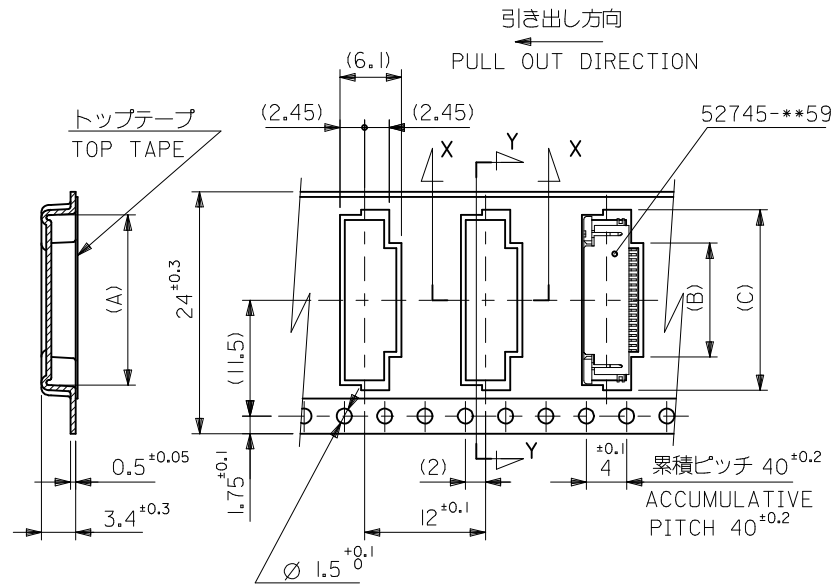
52745-\*\*97 MODEL NO.

REVISED EC NO: J2009-2061 DRWN:TKON 2009/05/20 CHKD:HMATSUMOTO 2009/05/21 APPR:NUKITA 2009/05/21	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	±---	DRAWN BY M.NABEI	DATE '05/02/14	TITLE 0.5 FPC CONN UPR CONT EMBSTP PKG -LEAD FREE-			
		10 OVER 30 UNDER	±---	CHECKED BY K.TOJO	DATE '05/02/14	MOLEX INCORPORATED			
		30 OVER	±---	APPROVED BY N.UKITA	DATE '05/02/14	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-52745-051	SHEET NO. 1 OF 3
ANGULAR ±---°		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					



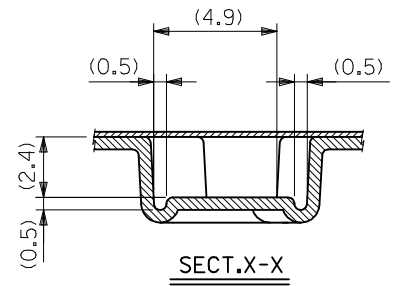
16	21.4	17.4	2.8	8.4	52745-0497	4
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(B)	(A)	MATERIAL NO.	極数 CIRCUIT

REVISED EC NO.: J2009-2061 DRWN:TKGN 2009/05/20 CHKD:HMATSUMOTO 2009/05/21 APPR:NUKITA 2009/05/21	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		10 UNDER	±---	DRAWN BY M. NABEI	DATE '05/02/14	TITLE 0.5 FPC CONN UPR CONT EMBSTP PKG -LEAD FREE-			
		10 OVER 30 UNDER	±---	CHECKED BY K. TOJO	DATE '05/02/14	APPROVED BY N. UKITA			
		30 OVER	±---	APPROVED BY N. UKITA	DATE '05/02/14	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-52745-051	
ANGULAR ±--- °		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					



SECT.Y-Y

24mm幅キャリアテープ  
24mm WIDTH CARRIER TAPE



SECT.X-X

24	29.4	25.4	17.4	10.8	16.4	52745-2097	20		
			16.9	10.3	15.9	-1997	19		
			16.4	9.8	15.4	-1897	18		
			15.9	9.3	14.9	-1797	17		
			15.4	8.8	14.4	-1697	16		
			14.9	8.3	13.9	-1597	15		
			14.4	7.8	13.4	-1497	14		
			13.9	7.3	12.9	-1397	13		
			13.4	6.8	12.4	-1297	12		
			12.9	6.3	11.9	-1197	11		
			12.4	5.8	11.4	-1097	10		
			11.9	5.3	10.9	-0997	9		
			11.4	4.8	10.4	-0897	8		
10.9	4.3	9.9	-0797	7					
10.4	3.8	9.4	52745-0697	6					
キャリアテープ幅 CARRIER TAPE WIDTH			E	D	(C)	(B)	(A)	MATERIAL NO.	極数 CIRCUIT

REVISED EC NO: J2009-2061 DRWN:TKON 2009/05/20 CHKD:HMATSUMOTO 2009/05/21 APPR:NUKITA 2009/05/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
	10 UNDER	±---	DRAWN BY M. NABEI	DATE '05/02/14	TITLE 0.5 FPC CONN UPR CONT EMBSTP PKG -LEAD FREE-				
	10 OVER 30 UNDER	±---	CHECKED BY K. TOJO	DATE '05/02/14	MOLEX INCORPORATED				
	30 OVER	±---	APPROVED BY N. UKITA	DATE '05/02/14	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-52745-051	SHEET NO. 3 OF 3	
	ANGULAR ±--- ° 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						