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**Part Number:** [0527451497](#)  
**Status:** **Active**  
**Overview:**  
**Description:** 0.50mm (.020") Pitch FFC/FPC Connector, Right Angle, SMT, ZIF, Top Contact Style, 14 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) 14  
 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.

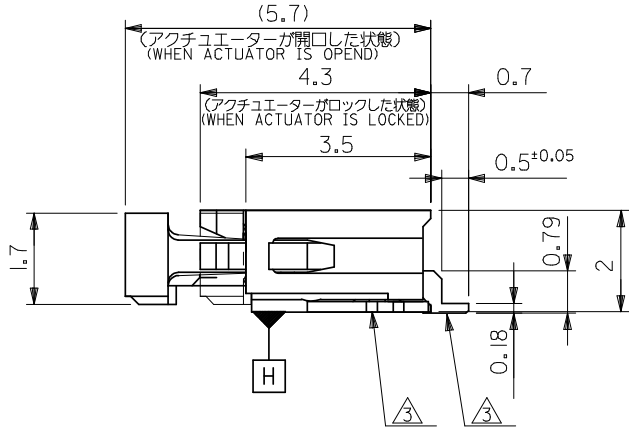
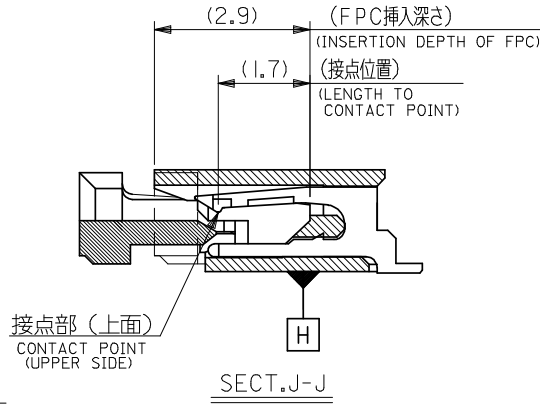
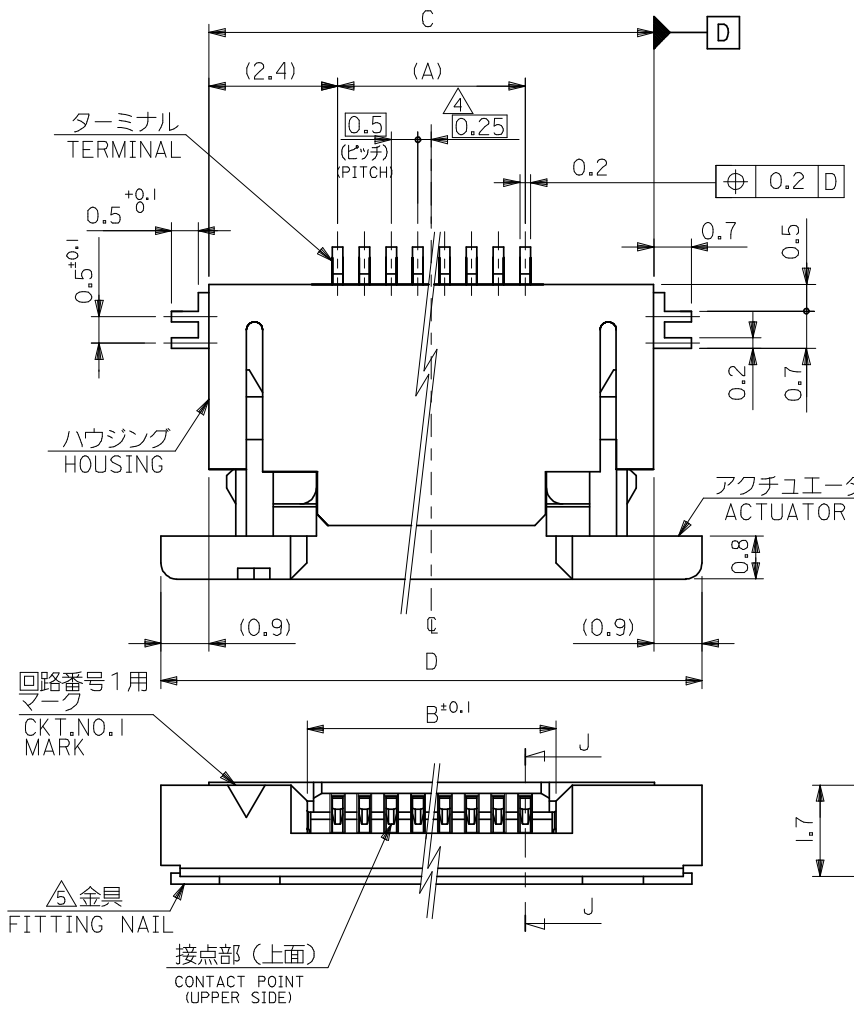
△偶数極に適用。  
 APPLY FOR EVEN CIRCUIT.

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

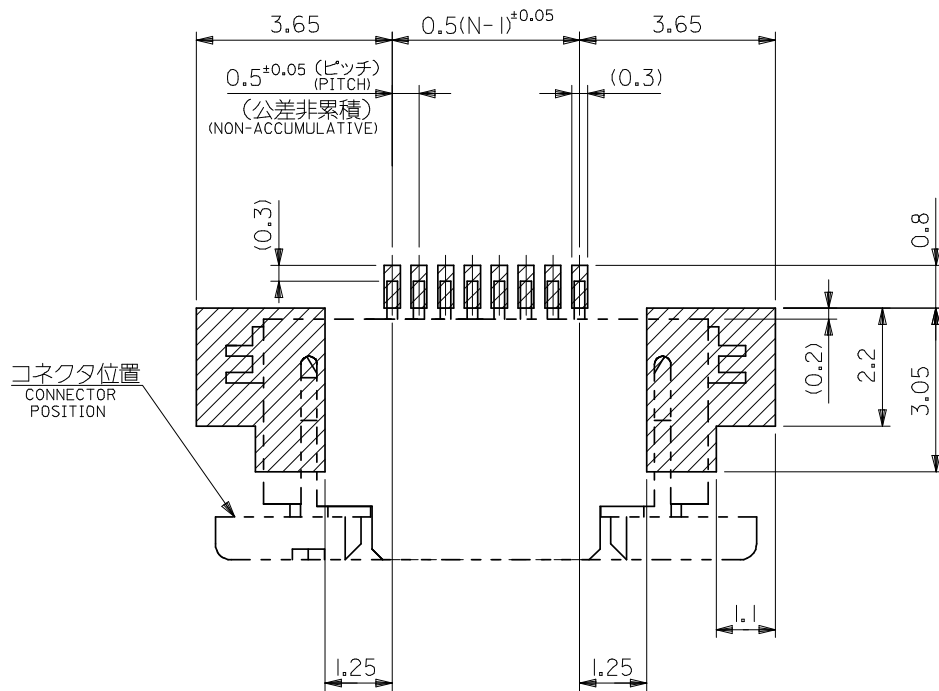
6. 本製品は 54745-\*\*\*17 の部分金メッキ品である。  
 THIS PRODUCT IS SELECTIVE GOLD PLATING OF 52745-\*\*\*17.

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

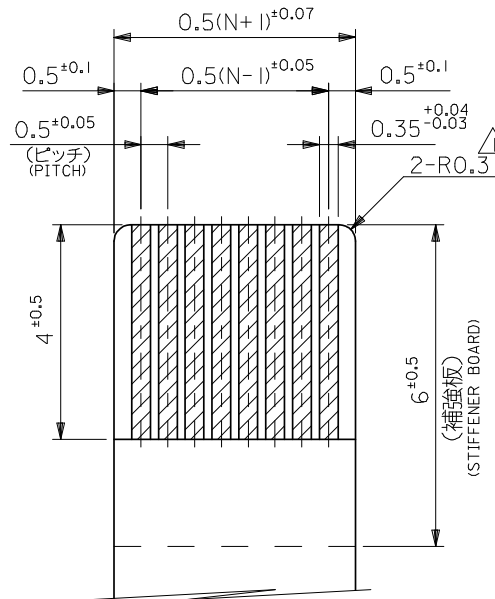
52745-\*\*\*59 MODEL NO.



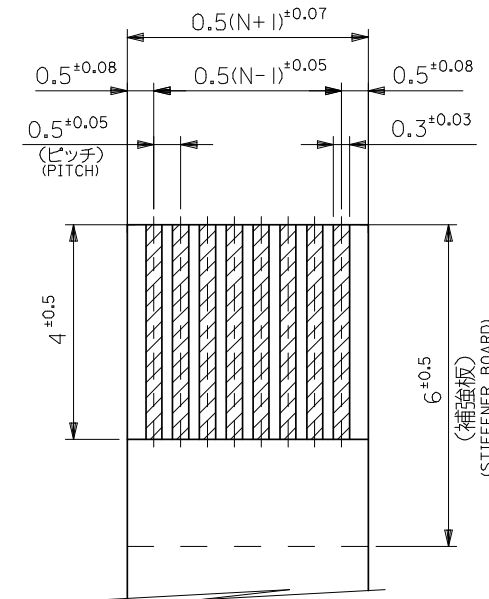
REVISED EC NO: J2008-4308 DRWN: MABEI 2008/06/27 CH'KD: THARUYAMA 2008/06/30 APPR: NUKITA 2008/06/30	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY M. NABEI	DATE '05/02/14	TITLE 0.5 FPC CONN ASSY ZIF UPR CONT -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 TABLE		SD-52745-050		1 OF 2		



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 SIDE.  
RECOMMENDED MATERIAL:  
STIFFENER FILM: POLYIMIDE  
BONDING AGENT: THERMOSETTING BONDING AGENT

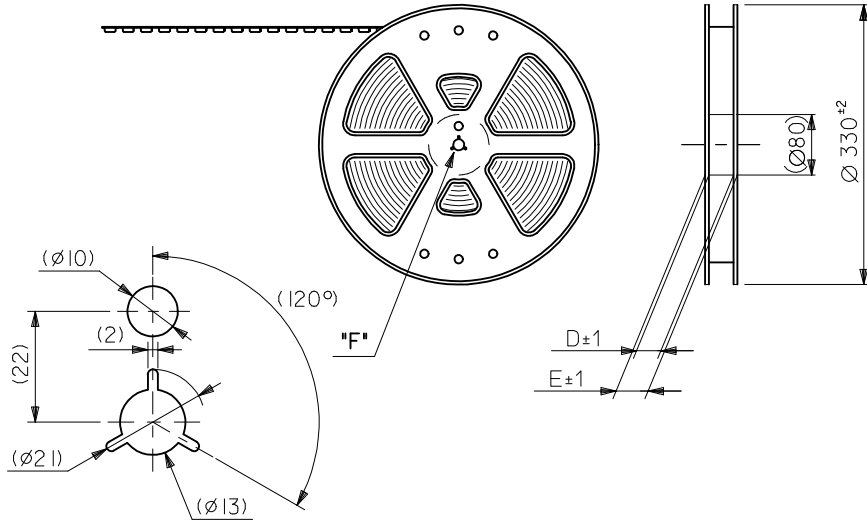
注記 NOTES

△ 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	MOLEX INCORPORATED	
	30 OVER	±0.3	APPROVED BY N. UKITA	DATE '05/02/14	DOCUMENT NO. SD-52745-050	SHEET NO. 2 OF 2
	ANGULAR	±3 °	MATERIAL NO. SEE SHEET 1		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						

引き出し方向  
←  
PULL OUT  
DIRECTION



**DETAIL "F"**

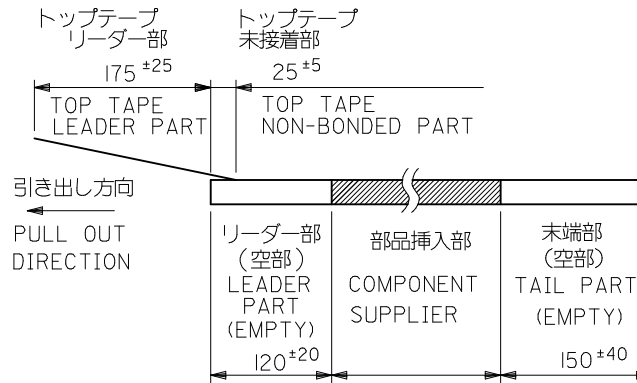
5. 材料 キャリアテープ:ポリプロピレン (PP)  
 トップテープ:PET, PE, PEF  
 リール:ポリスチレン (PS) <リサイクル材を含む>  
 MATERIAL CARRIER TAPE:POLYPROPYLENE  
 TOP TAPE:PET,PE,PEF  
 REEL:POLYSTYRENE(PS)  
 <RECYCLE MATERIAL CONTAINED>

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

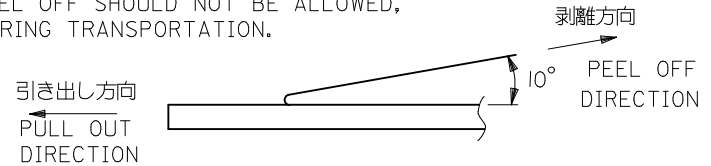
7. 本製品は乾燥剤入り、ハイバリア梱包仕様である。  
 THIS PRODUCT IS HIGH BARRIER PACKAGE WITH DESICCANT.

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

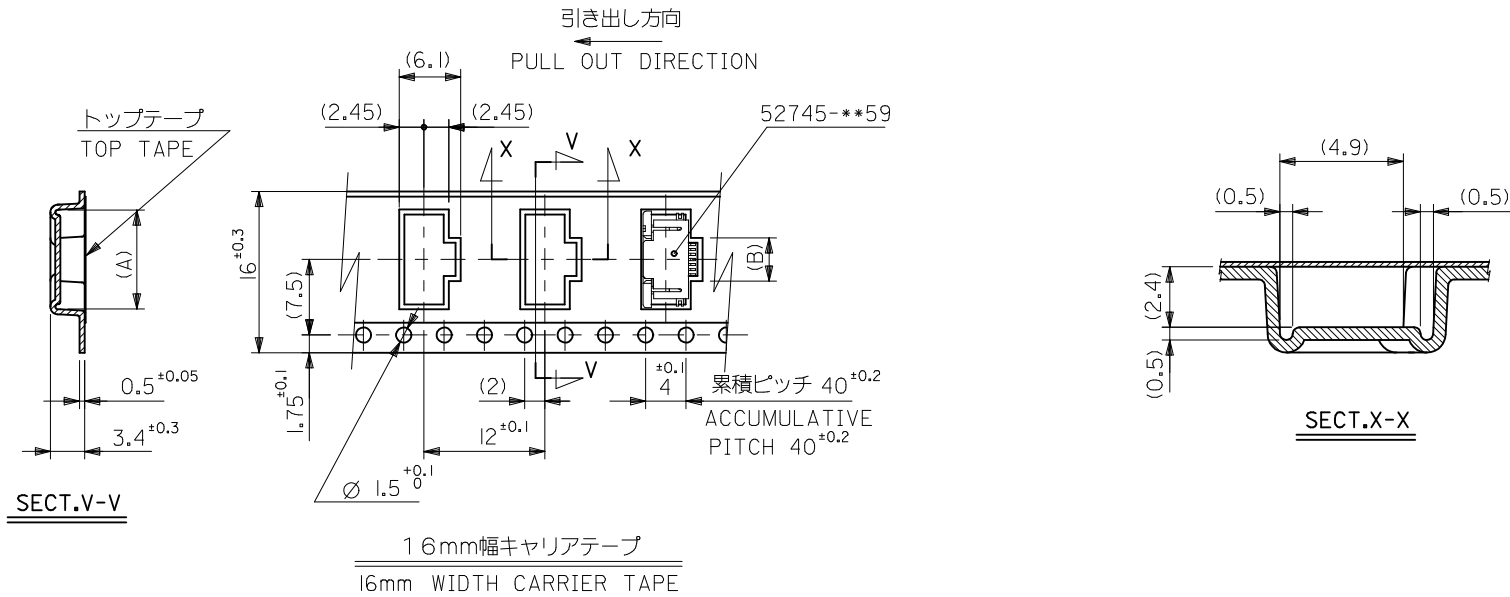


- トップテープの剥離強度:(剥離方向は下図参照)  
 0.1N~1.3N(10gf~130gf)尚、本規格値は、出荷時に適用。  
 (但し、輸送時に剥離が発生しない事。)  
 PEELING OFF FORCE OF TOP TAPE:  
 0.1N~1.3N(10gf~130gf)(PEELING DIRECTION AS SHOWN IN FOLLOWING FIG.)  
 THIS REQUIREMENT SHOULD BE APPLIED AT SHIPMENT  
 PEEL OFF SHOULD NOT BE ALLOWED,  
 DURING TRANSPORTATION.



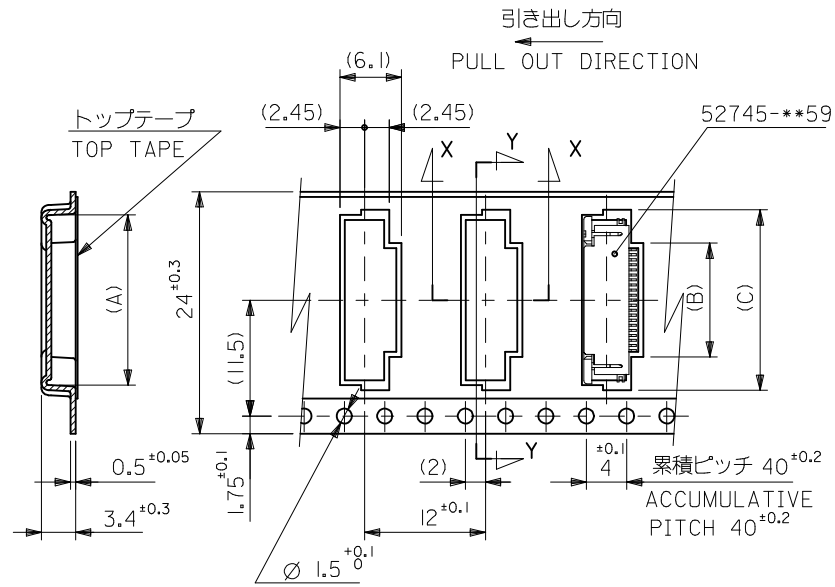
52745-\*\*97 MODEL NO.

REVISED EC NO: J2009-2061 DRWN:TKON 2009/05/20 CHKD:HATSUMOTO 2009/05/21 APPR:NUKITA 2009/05/21 REV A	DESCRIPTION	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.NUKITA	DATE '05/02/14				
ANGULAR ±---°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-52745-051		SHEET NO. 1 OF 3	
SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									



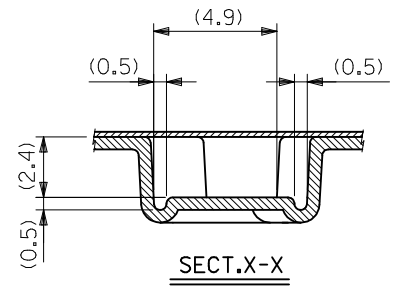
16	21.4	17.4	2.8	8.4	52745-0497	4
キャリアテープ幅 CARRIER TAPE WIDTH	E	D	(B)	(A)	MATERIAL NO.	極数 CIRCUIT

REVISED EC NO.: J2009-2061 DRWN:TKGN 2009/05/20 CHKD:HMATSUMOTO 2009/05/21 APPR:NUKITA 2009/05/21	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	REV	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	DATE '05/02/14	MOLEX INCORPORATED
		30 OVER ± ---	ANGULAR ± --- °	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-52745-051	SHEET NO. 2 OF 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			



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

<b>REVISED</b> 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				