



产品编号 : [511631100](#)

**Product Description :** 2.54mm Pitch SL Header, Low Profile, Single Row, Right Angle, 3.05mm Pocket, Shrouded, 12 Circuits, 0.76µm Gold (Au) Selective Plating, Tin (Sn) PC Tail Plating

**Series Number :** 70553

**Status :** Active

**Product Category :** PCB Headers and Receptacles



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## Documents & Resources

### Drawings

[Drawing 705530116\\_sd.pdf](#)

[Packaging Design Drawing PK-70873-0015-001.pdf](#)

### 3D Models and Design Files

[3D Model 705530116\\_stp.zip](#)

### Specifications

[Product Specification PS-70400-001.pdf](#)

[Product Specification PS-70541-001.pdf](#)

[Test Summary TS-70541-100-001.pdf](#)

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## Product Environment Compliance

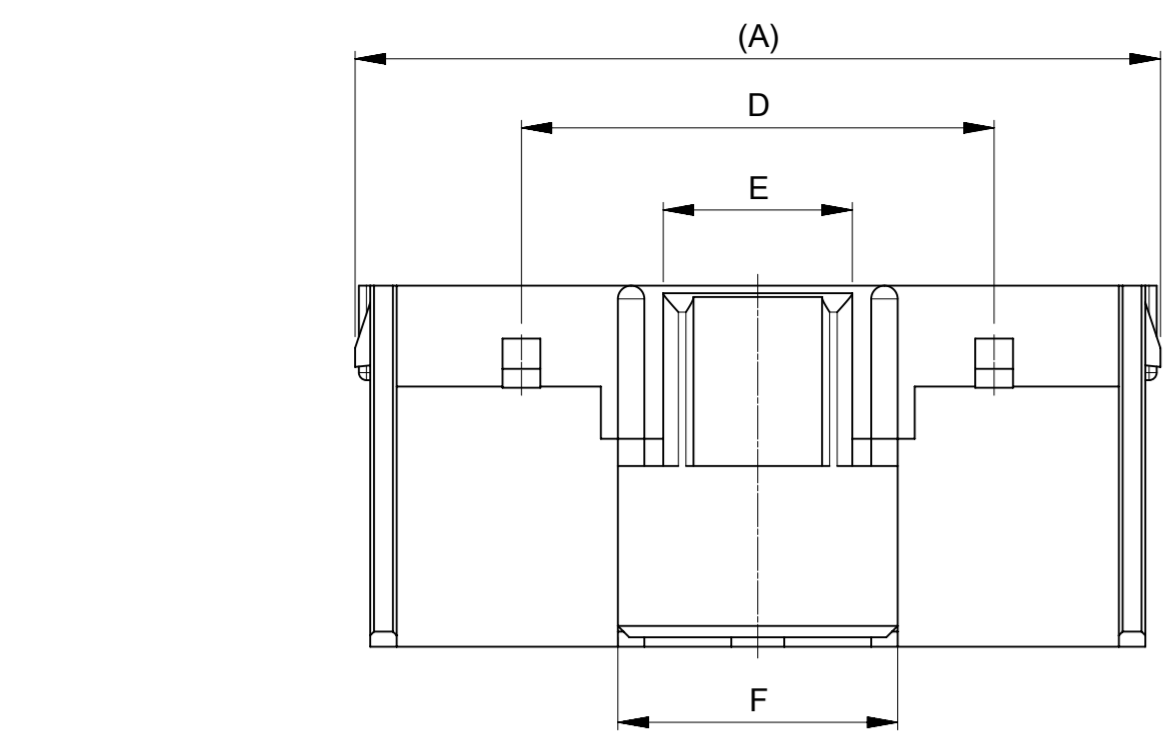
### Compliance

GADSL/IMDS	Compliant with Exemption 44; 34; 33
China RoHS	
EU ELV	Not Relevant
Low-Halogen Status	Not Low-Halogen per IEC 61249-2-21
REACH SVHC	Not Contained per D(2023)3788-DC (14 Jun 2023)
EU RoHS	Compliant per EU 2015/863

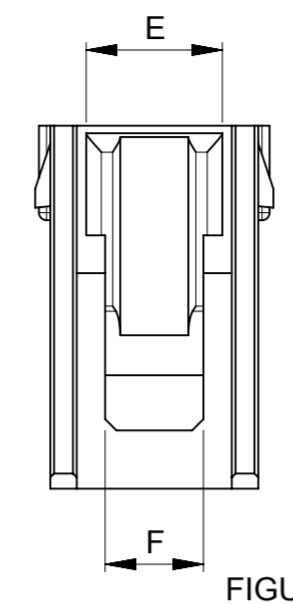
### Multiple Part Product Compliance Statements

- Eu RoHS

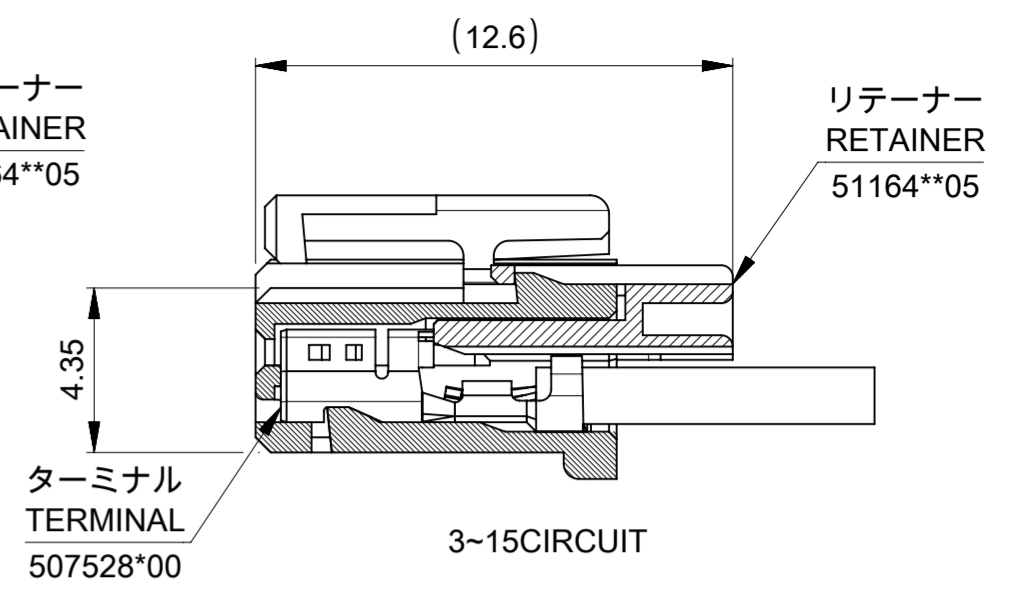
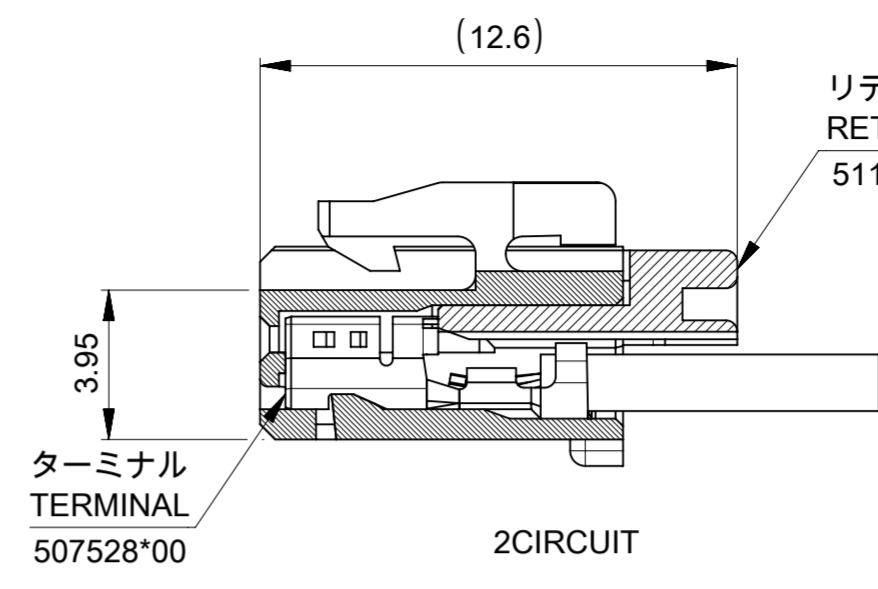
- REACH SVHC



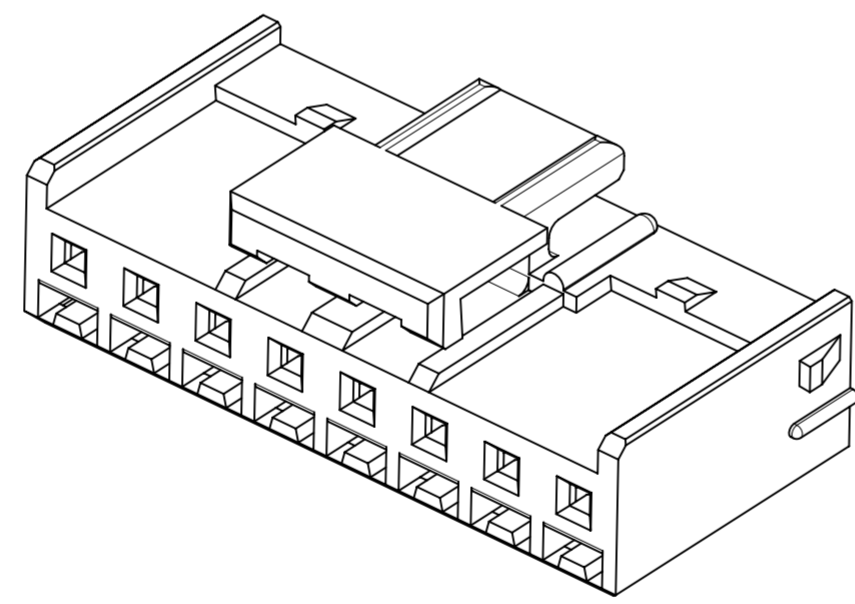
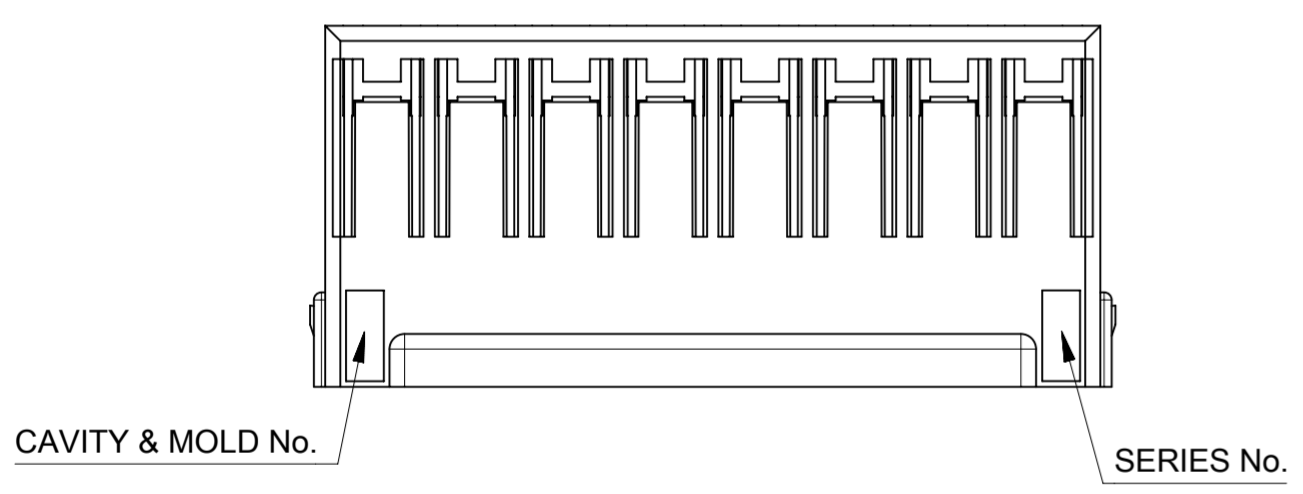
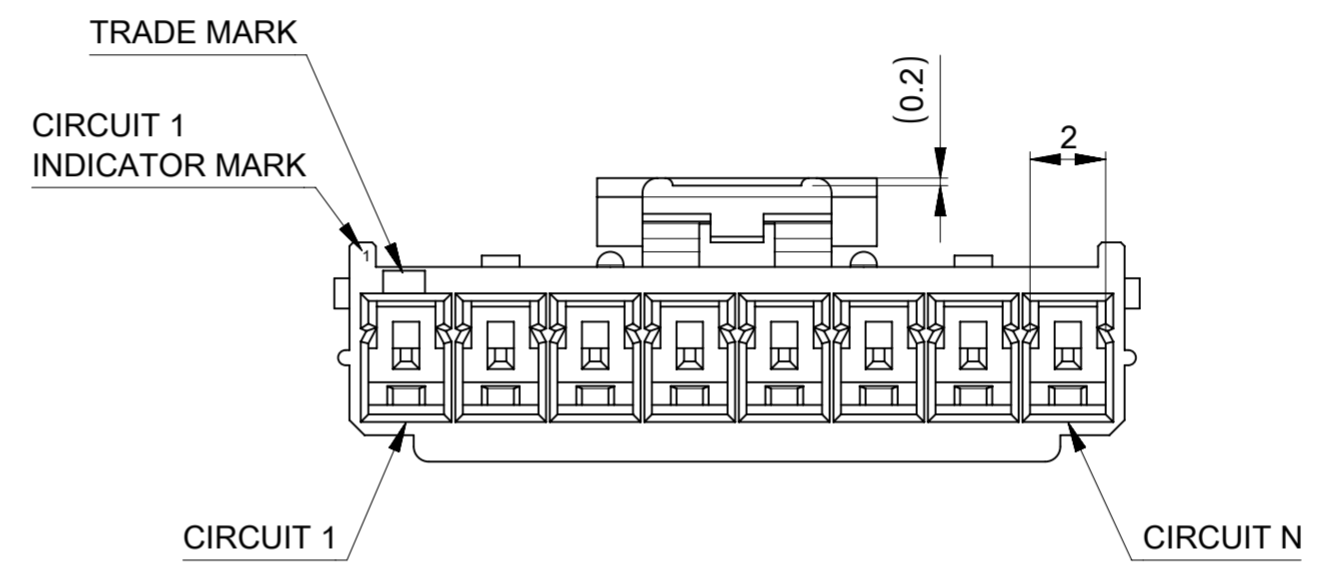
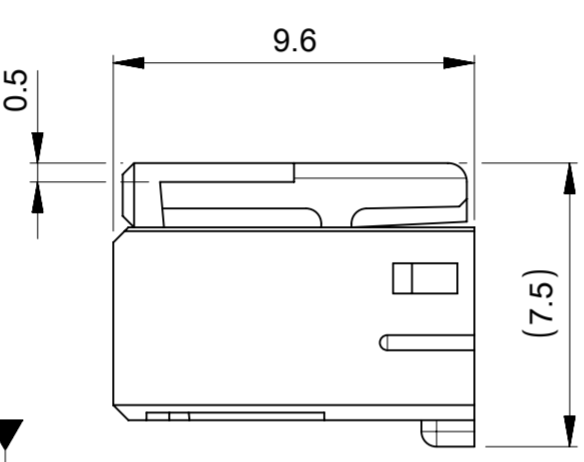
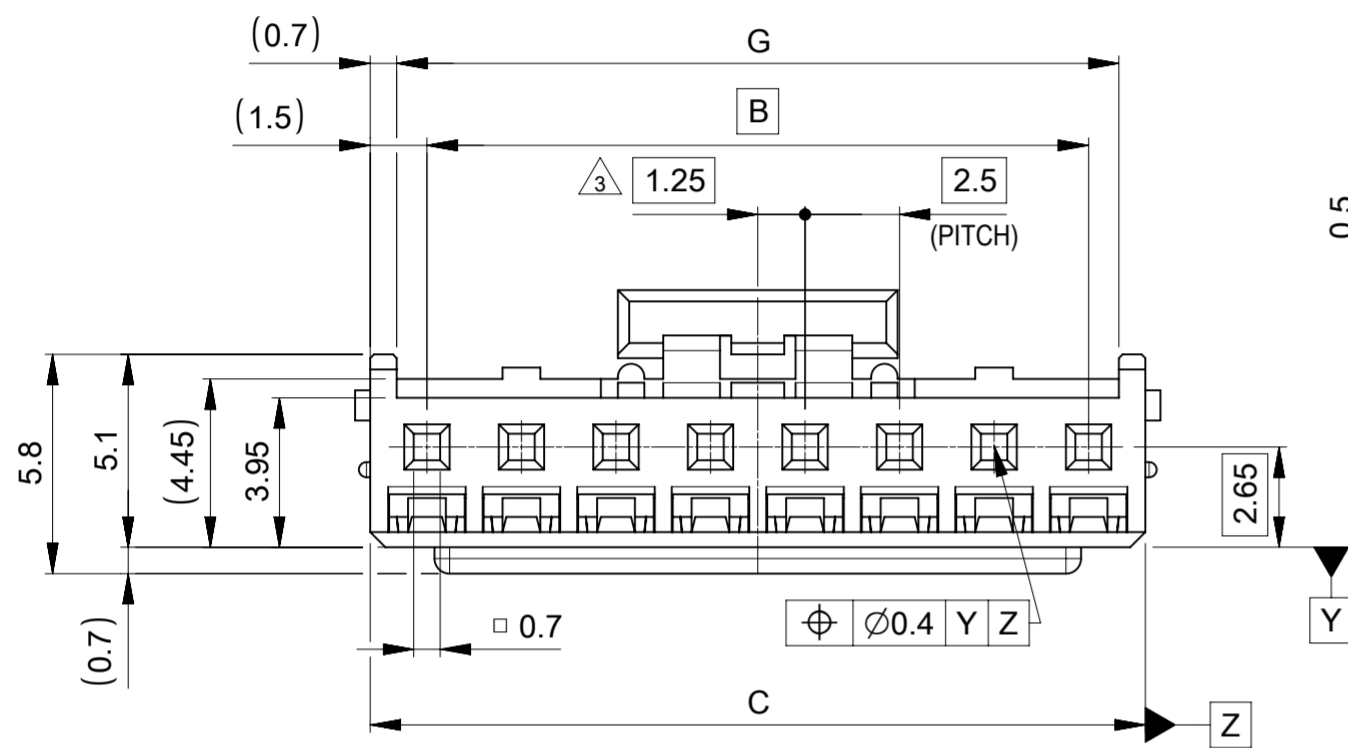
2極ロック形状  
2CIRCUIT LOCK FORM



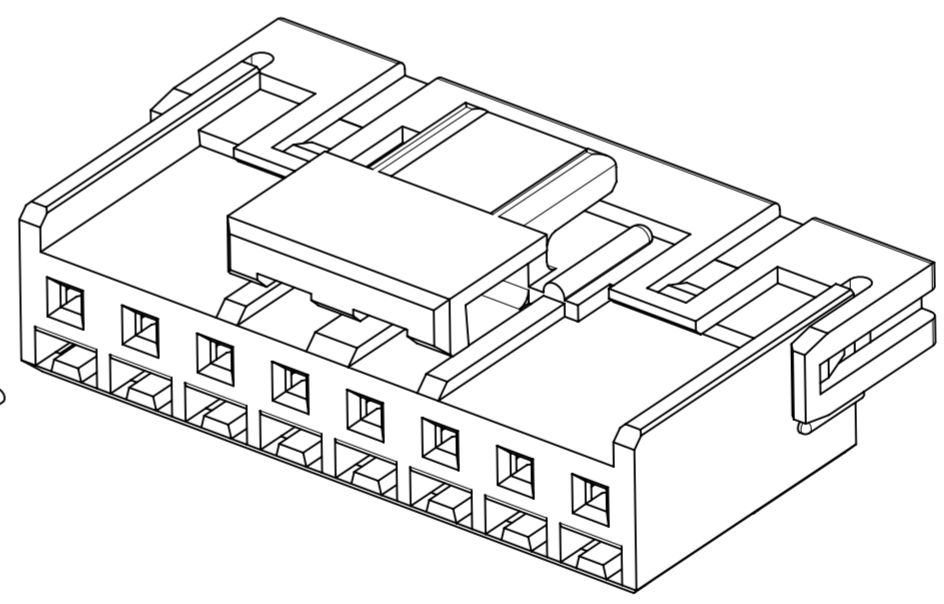
2極形状  
FIGURE OF 2 CIRCUIT



ターミナル及びリテーナー装着状態図  
TERMINAL AND RETAINER ASSEMBLY DRAWING



リテーナー未装着状態図  
ASSEMBLY DRAWING



リテーナー装着状態図  
RETAINER ASSEMBLY DRAWING

36.6	7.4	5	12.5	38	35	38.8	5116315**	15
34.1	7.4	5	12.5	35.5	32.5	36.3	5116314**	14
31.6	7.4	5	12.5	33	30	33.8	5116313**	13
29.1	7.4	5	12.5	30.5	27.5	31.3	5116312**	12
26.6	7.4	5	12.5	28	25	28.8	5116311**	11
24.1	7.4	5	12.5	25.5	22.5	26.3	5116310**	10
21.6	7.4	5	12.5	23	20	23.8	5116309**	9
19.1	7.4	5	12.5	20.5	17.5	21.3	5116308**	8
16.6	7.4	5	-	18	15	18.8	5116307**	7
14.1	7.4	5	-	15.5	12.5	16.3	5116306**	6
11.6	7.4	5	-	13	10	13.8	5116305**	5
9.1	7.4	5	-	10.5	7.5	11.3	5116304**	4
6.6	5	3	-	8	5	8.8	5116303**	3
4.1	2.6	3.6	-	5.5	2.5	6.3	5116302**	2
G	F	E	D	C	B	(A)	発注番号 ORDER No.	極数 CIRCUIT SIZE

- NOTE
- △ 材料：TABLE1参照  
MATERIAL:SEE TABLE1
  - △ 適合ハウジング, 嵌合相手, 関連ドキュメントについてはSHEET 2 を御参照ください。  
PLEASE REFER TO SHEET 2 FOR APPLICABLE HOUSING, MATING PARTNER AND RELATED DOCUMENTS.
  - △ 偶数極に適用  
APPLY FOR EVEN CIRCUIT.
  - 4. 本製品のプラスチック部に黒点等が確認される場合や、色合いが異なる場合が御座いますが、製品性能に影響は御座いません  
THERE IS NO INFLUENCE IN THE PRODUCT PERFORMANCE IN CASE THAT THE BLACK SPOT OR BUBBLE ETC. MIGHT BE APPEARED ON THE PLASTIC PART OF THIS PRODUCT AND THE COLOR SHADE MIGHT BE DIFFERENT.
  - 5. GLOW WIRE TEST適合品  
THIS PRODUCT IS GLOW WIRE TEST COMPATIBLE.

△ TABLE1

部品 PART	材質 MATERIAL
ハウジング HOUSING	51163**00 ポリエステル(PBT):ガラス非含有,UL94V-0,色:ナチュラル(白) POLYESTER(PBT):GLASS UNFILLED,UL94V-0,COLOR:NATURAL(WHITE)
	51163**41 ポリアミド(PA):ガラス非含有,UL94V-0,色:黒 POLYAMIDE(PA):GLASS UNFILLED,UL94V-0,COLOR:BLACK

DOCUMENT STATUS	P1	RELEASE DATE	2023/05/15 02:57:18
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THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE	CURRENT REV DESC:
mm	NTS	
GENERAL TOLERANCES (UNLESS SPECIFIED)		
ANGULAR TOL	± 3.0°	EC NO: 652870
4 PLACES	± 0.2	DRWN: MIKEDA01 2023/03/27
3 PLACES	± 0.2	CHK'D: SAKIYAMA 2023/05/11
2 PLACES	± 0.2	APPR: AIDA 2023/05/15
1 PLACE	± 0.2	INITIAL REVISION:
0 PLACES	± 0.2	DRWN: RWATANABE01 2019/04/22
		APPR: SAKIYAMA 2020/09/28
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING SERIES
		A2-SIZE 51163
MATERIAL NUMBER		CUSTOMER
51163000-SD		GENERAL
DOC TYPE	DOC PART	REVISION
PSD	000	B
SHEET NUMBER		
1 OF 2		

**molex**

MINI-LOCK 2.5  
SINGLE ROW RECEPTACLE HOUSING WITH RETAINER

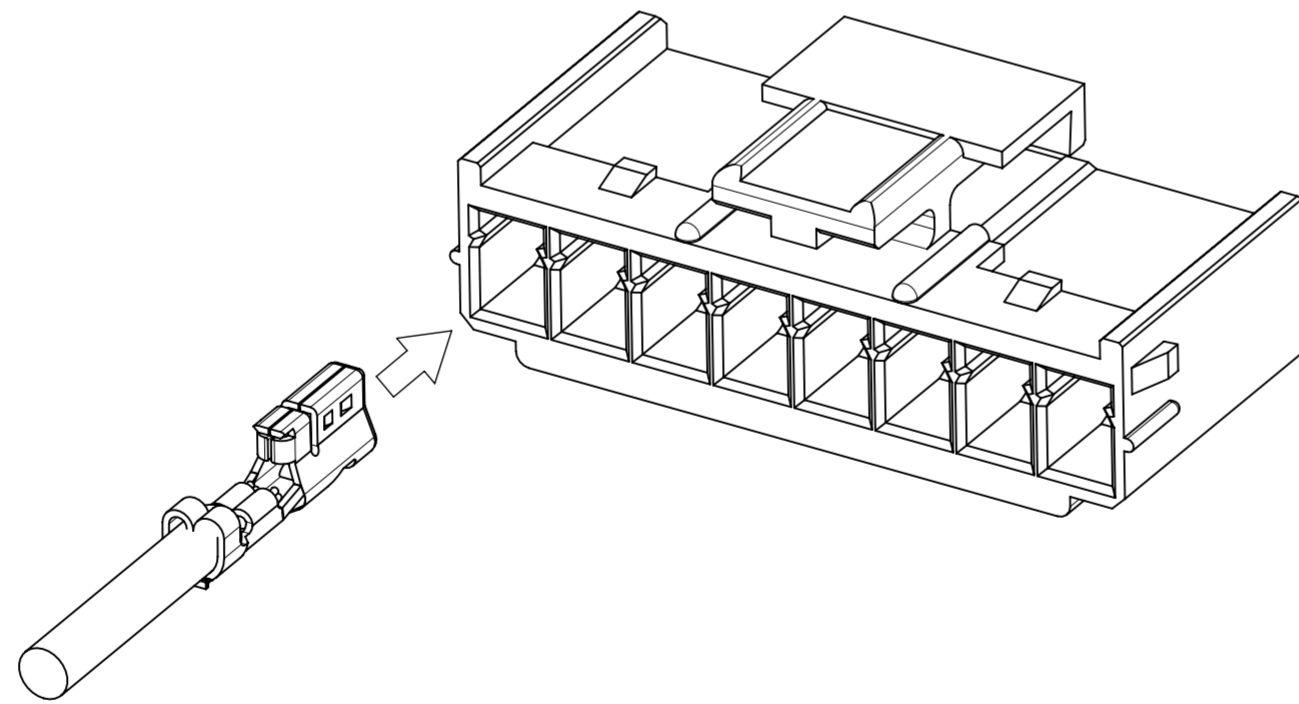
PRODUCT CUSTOMER DRAWING

△ 適合製品及び各種仕様書  
 APPLICABLE PRODUCT AND VARIOUS SPECIFICATIONS

梱包仕様書 PACKAGING SPECIFICATION	PART NUMBER		SPECIFICATION NUMBER	
	51163**0*		511639200-SPK 200	
適合端子 APPLICABLE TERMINAL	PART NUMBER	PLATING TYPE	WIRE SIZE(AWG)	
	507528200	TIN	#20-#22	
	507528400	TIN	#24-#26	

適合リテーナー APPLICABLE RETAINER	51164				
シリーズ番号 SERIES No.					
適合嵌合相手 MATE WITH	THROUGH HOLE			SURFACE MOUNT	
	VERTICAL	VERTICAL (FOR POTTING)	RIGHT ANGLE	VERTICAL	RIGHT ANGLE
	TIN PLATING		TIN PLATING	TIN PLATING	TIN PLATING
	53375 53476	53517	53426	215931	215932
製品仕様書 PRODUCT SPECIFICATION	511630000-PS PS 000				
取扱説明書 APPLICATION SPECIFICATION	2166940000-AS PS 000				

製品嵌合図は各"適合嵌合相手"図面参照のこと  
 MATING VIEW : REFER TO EACH "MATE WITH" PART DRAWING.

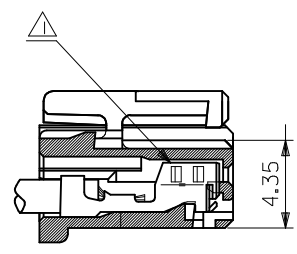
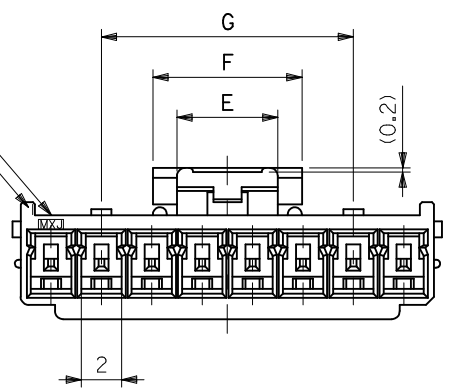


圧着ケーブル挿入方向  
 HARNESS ASSY INSERTION DIRECTION

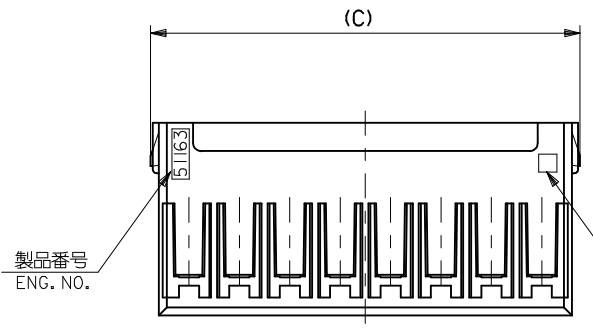
黒 BLACK	ナチュラル(白) NATURAL(WHITE)	ハウジング色 HOUSING COLOR
PA GF0, UL94 V-0	PBT GF0, UL94 V-0	樹脂種 RESIN TYPE
511631541	511631500	15
511631441	511631400	14
511631341	511631300	13
511631241	511631200	12
511631141	511631100	11
511631041	511631000	10
511630941	511630900	9
511630841	511630800	8
511630741	511630700	7
511630641	511630600	6
511630541	511630500	5
511630441	511630400	4
511630341	511630300	3
511630241	511630200	2
発注番号 ORDER NO.		極数 CIRCUIT SIZE

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS	SCALE	CURRENT REV DESC:							
mm	NTS								
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL	± 3.0°	EC NO: 652870 DRWN: MIKEDA01 2023/03/27 CHK'D: SAKIYAMA 2023/05/11 APPR: AIDA 2023/05/15							
4 PLACES	± 0.2	INITIAL REVISION: DRWN: RWATANABE01 2019/04/22 APPR: SAKIYAMA 2020/09/28							
3 PLACES	± 0.2								
2 PLACES	± 0.2	DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	PRODUCT CUSTOMER DRAWING		
1 PLACE	± 0.2	511630000-SD		PSD	000	B			
0 PLACES	± 0.2	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	GENERAL		2 OF 2		
			A2-SIZE	51163					

△  
トレードマーク  
TRADE MARK  
回路番号 1  
CIRCUIT NO.1

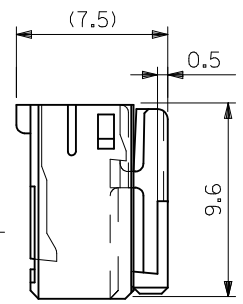


ターミナル装着状態図  
TERMINAL ASSEMBLY DRAWING

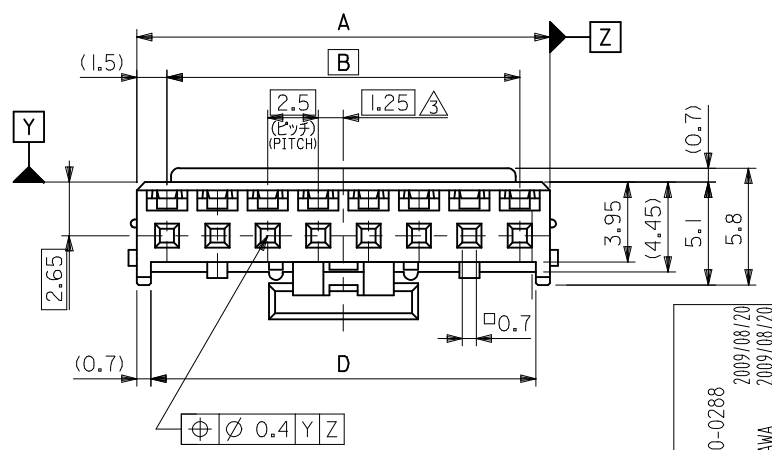


製品番号  
ENG. NO.

△  
キャビティー番号  
及び金型番号  
CAVITY NO.  
AND MODEL NO.



12.5	7.4	5	36.6	38.8	35	38	51163-158*	15
↑	↑	↑	34.1	36.3	32.5	35.5	↑ -148*	14
			31.6	33.8	30	33	↑ -138*	13
			29.1	31.3	27.5	30.5	↑ -128*	12
			26.6	28.8	25	28	↑ -118*	11
			24.1	26.3	22.5	25.5	↑ -108*	10
↓			21.6	23.8	20	23	↑ -098*	9
12.5			19.1	21.3	17.5	20.5	↑ -088*	8
X			16.6	18.8	15	18	↑ -078*	7
			14.1	16.3	12.5	15.5	↑ -068*	6
			11.6	13.8	10	13	↑ -058*	5
	7.4	5	9.1	11.3	7.5	10.5	↓ -048*	4
	5	3	6.6	8.8	5	8	↓ 51163-038*	3
G	F	E	D	(C)	B	A	MATERIAL AND ORDER No. △	CIRCUIT No.



REVISED  
EC NO: J2010-0288  
DRWN: YG010 2009/08/20  
CHKD: KASAKAWA 2009/08/20  
APPR: NUKITA 2009/08/24

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  
DRAWN BY K. HARADA  
DATE 1997/10/2  
CHECKED BY T. ITO  
DATE 1997/11/12  
APPROVED BY M. FUKUSHIMA  
DATE 1997/11/12  
MATERIAL NO.  
ENTER PART

SCALE 4:1  
DESIGN UNITS METRIC  
THIRD ANGLE PROJECTION  
TITLE 2.5 W/B CONN HSG (POSITIVE LOCK)  
MOLEX MOLEX INCORPORATED  
DOCUMENT NO. SD-51163-\*\*-00  
SHEET NO. 1 OF 2  
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

注記 NOTES

- ① 適合ターミナル：5035I-8\*00  
APPLICABLE TERMINAL : 5035I-8\*00
- 2. 嵌合相手：53375,53426 シリーズ  
MATE WITH : 53375,53426 SERIES
- ③ 偶数極の製品に適用。  
APPLY EVEN CIRCUIT PRODUCTS.
- ④ トレードマーク：Mプラス 1 ~ 2 文字のアルファベットにて構成。(例 MXJ)  
但し "J" は JAPAN を示す。  
FORMED BY M AND 1 ~ 2 MORE LETTER OF ALPHABET (e.g. MXJ)  
(TO TRADE MARK), BUT "J" SHOW JAPAN.
- ⑤ キャビティー番号：1桁~2桁の数字  
金型番号：アルファベット1文字にて構成。(例, 1A, 10B)  
FORMED BY 1 DIGIT TO 2 DIGIT NUMBERS (TO CAVITY  
NO.) AND BY 1 LETTER OF ALPHABET (TO MOLD NO.).  
(e.g. 1A, 10B)
- ⑥ MATERIAL AND ORDER No.  
51163-\*\*00  
CIRCUIT SIZE  
極数
- 7. 材料:PBT, UL 94V-0
- 8. 色:白 WHITE (NATURAL)



REVISED EC NO: C	2009/08/20 DRWN:Y.GOTO CHKD:KASAKAWA APPR:	DESCRIPTION REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			10 UNDER	±0.2	DRAWN BY K. HARADA	DATE 1997/10/2	TITLE 2.5 W/B CONN HSG (POSITIVE LOCK)			
			10 OVER 30 UNDER	±0.25	CHECKED BY T. ITO	DATE 1997/11/12				
			30 OVER	±0.3	APPROVED BY M. FUKUSHIMA	DATE 1997/11/12	MATERIAL NO.		DOCUMENT NO.	
ANGULAR ±3 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		ENTER PART		MOLEX INCORPORATED		SD-51163-**00		
				SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

- Low-Halogen

### Multiple Part Industry Compliance Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

### EU RoHS Certificate of Compliance

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## Part Details

### General

Status	Active
Category	PCB Headers and Receptacles
Series	70553
Description	2.54mm Pitch SL Header, Low Profile, Single Row, Right Angle, 3.05mm Pocket, Shrouded, 12 Circuits, 0.76µm Gold (Au) Selective Plating, Tin (Sn) PC Tail Plating
Application	Signal, Wire-to-Board
Component Type	PCB Header
Product Family	SL Modular Connectors
Product Name	SL
UPC	800753764767

### Agency

CSA	LR19980
UL	E29179

### Electrical

Current - Maximum per Contact	3.0A
Voltage - Maximum	250V

### Physical

Breakaway	No
Circuits (Loaded)	12
Circuits (maximum)	12

Color - Resin	Black
Durability (mating cycles max)	50
Flammability	94V-0
Glow-Wire Capable	No
Guide to Mating Part	Yes
Lock to Mating Part	Yes
Material - Metal	Brass, Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Net Weight	2.669/g
Number of Rows	1
Orientation	Right Angle
Packaging Type	Tube
PC Tail Length	3.30mm
PCB Locator	No
PCB Retention	None
PCB Thickness - Recommended	1.60mm
Pitch - Mating Interface	2.54mm
Plating min - Mating	0.762µm
Plating min - Termination	1.905µm
Polarized to Mating Part	Yes
Shrouded	Fully
Stackable	No
Temperature Range - Operating	-40° to +105°C
Termination Interface Style	Through Hole

#### Solder Process Data

Lead-Free Process Capability	WAVE
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#### Mates With / Use With

##### Mates with Part(s)

Description	Part Number
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SL Single Row Crimp Housings and CPA Retainers	<u>70066</u>
SL Single Row Female Insulation Displacement Connector Assemblies	<u>70400</u>
SL Single Row Female Receptacles	<u>70430</u>

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This document was generated on Feb 28, 2024