

## 0.5mm Pitch Board to Board Connector

# 5652 Series

シリーズ (Series)	5652
接続形態 (Connection Style)	基板平行接続 (Parallel Connection)
基板間高さ (Stacking Height)	15.0 to 20.0mm
極間隔 (Pitch)	0.5mm
極数 (No. of Positions)	20 to 100 Pos.
定格電流 (Rated Current)	DC 0.6A/Contact
定格電圧 (Rated Voltage)	DC 50V/Contact
耐電圧 (D. W. Voltage)	AC 500Vrms/min.
コンタクト材質 (Contact Material)	銅合金 (Copper alloy)
インシュレータ材質 (Insulator Material)	耐熱樹脂 (Heat-resistant plastic)
フローティング量 (Floating)	XY: $\pm 0.85\text{mm}$
使用温度範囲 (Operating Temperature)	-40 to +125°C



### ◆概要

5652 シリーズは、高速伝送と高い信頼性を兼ね備えたフローティング機構付き基板対基板コネクタです。16Gbps の高速伝送を実現しながら、X,Y 方向に  $\pm 0.85\text{mm}$  の可動 ( $F/P^{*1}=170\%$ ) を実現し、一般的にフローティング機構では難しいとされる高速伝送の機械特性と電気特性を大幅に引き上げました。PCIe Gen.1~Gen.4、MIPI D/C-PHY、SATA3.0、USB3.1 Gen.1 など、さまざまな高速規格に準拠し、業界で初めて<sup>※2</sup>USB3.1 Gen.2 にも対応。車載機器に求められる 125°C までの厳しい高温環境にも対応可能です。

<sup>※1</sup> $F/P \cdots F = \text{Floating (フローティング量)}/P = \text{Pitch (ピッチ)}$

<sup>※2</sup>0.5mm ピッチフローティング基板対基板コネクタにおいて。

2020 年 11 月京セラ調べ。

### ◆特長

- (1) PCIe Gen.4 (16GT/s) や USB3.1 Gen.2 などの高速伝送規格に対応
- (2) 伝送規格を考慮した形状の最適化により、高速伝送対応でありながら基板間高さ許容量として  $\pm 0.75\text{mm}$  の対応が可能です。
- (3) 使用温度範囲 -40°C ~ +125°C の高耐熱製品であり、ADAS、インフォテインメントなどの車載機器への搭載に適しています。また、IATF 16949 にも準拠した工場にて製造しています。
- (4) 環境に優しい RoHS 指令対応、ハロゲンフリー対応品です。

### ◆Outline

The 5652 series is a board-to-board connector with a floating mechanism that combines high-speed transmission and high reliability. While achieving high-speed transmission of 16 Gbps, it achieves  $\pm 0.85\text{mm}$  of movement in the X and Y directions ( $F/P^{*1}=170\%$ ), significantly improving the mechanical and electrical characteristics of high-speed transmission, which is generally considered difficult with a floating mechanism.

It complies with various high-speed standards such as PCIe Gen.1 to Gen.4, MIPI D/C-PHY, SATA3.0, USB3.1 Gen.1, and is the first<sup>※2</sup> in the industry to also support USB3.1 Gen.2. It can also withstand harsh high-temperature environments up to 125°C, which are required for in-vehicle equipment.

<sup>※1</sup> $F/P: F = \text{Floating amount}/P = \text{Pitch}$

<sup>※2</sup>Among 0.5mm-pitch floating board-to-board connectors (according to research by Kyocera as of November 2020)

### ◆Features

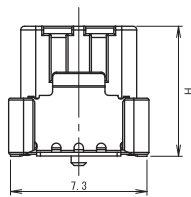
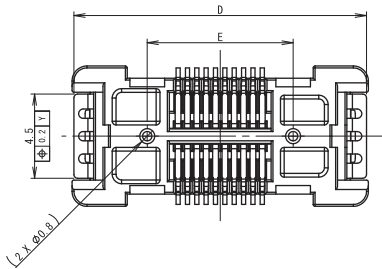
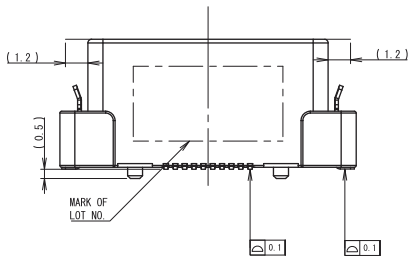
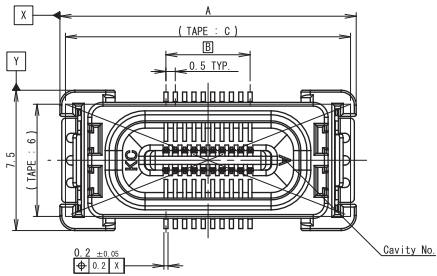
- (1) Complies with high-speed transmission standards such as PCIe Gen.4 (16 GT/s) and USB 3.1 Gen.2
- (2) Kyocera's 5652 Series can cope with a maximum  $\pm 0.75\text{mm}$  height tolerance between boards while still providing high-speed data transmission.
- (3) These highly heat-resistant products with operating temperatures ranging from -40°C to +125°C are suitable for installation in automotive equipment such as ADAS and infotainment systems. They are also IATF 16949 compliant.
- (4) RoHS compliant and Halogen-free



0.5mm ピッチ SMT フローティング  
0.5mm Pitch, SMT, Floating type

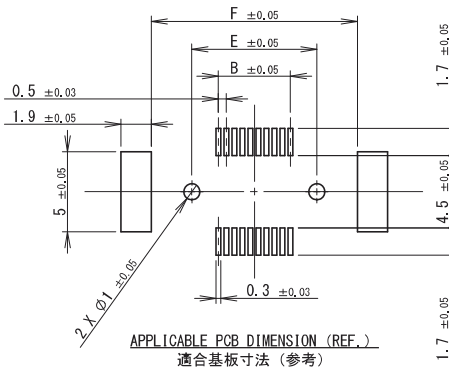
**FloXY<sup>®</sup> HS**

## ● Plug

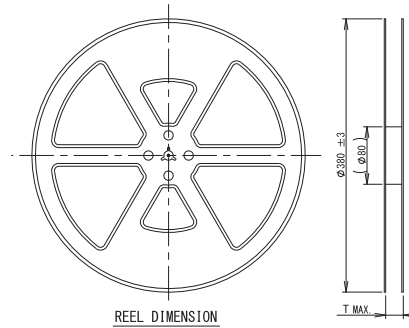
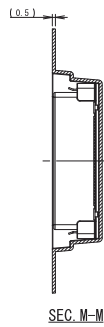
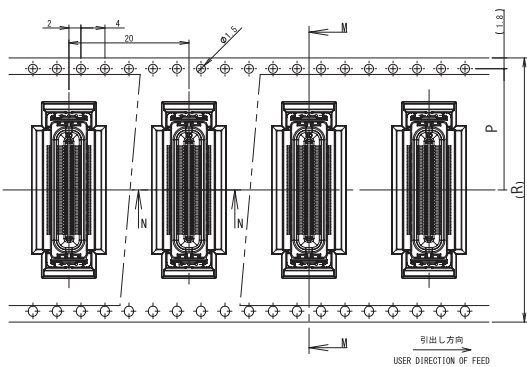


嵌合高さ Stacking Height	H
15.0mm	6.95
20.0mm	11.95

※その他の嵌合高さについてはお問合せ下さい。  
For other stacking heights, please contact us.



## ● Packaging



No. of Pos.	R	P	T
20	32	14. 2	38. 4
30	44	20. 2	50. 4
40	44	20. 2	50. 4
50	44	20. 2	50. 4
60	44	20. 2	50. 4
70	44	20. 2	50. 4
80	56	26. 2	62. 4
90	56	26. 2	62. 4
100	56	26. 2	62. 4

嵌合高さ Stacking Height	S
15.0mm	8.3
20.0mm	13.3

SEC. N-N

RoHS 対応品  
RoHS Compliant Product

Recommended plating types are mentioned in this catalogue. For other plating types and their specifications, and available numbers of positions, please feel free to contact our sales department.

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020E-2503-0

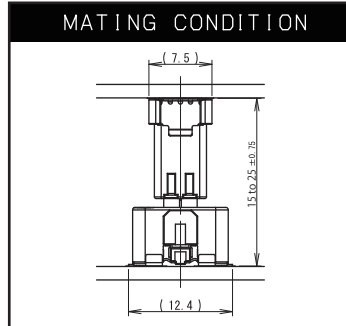
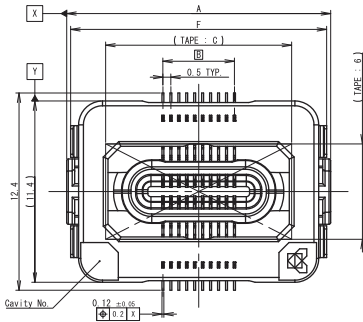


0.5mm Pitch  
652 Series

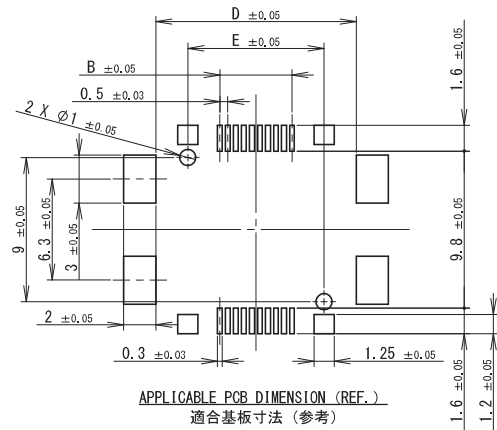
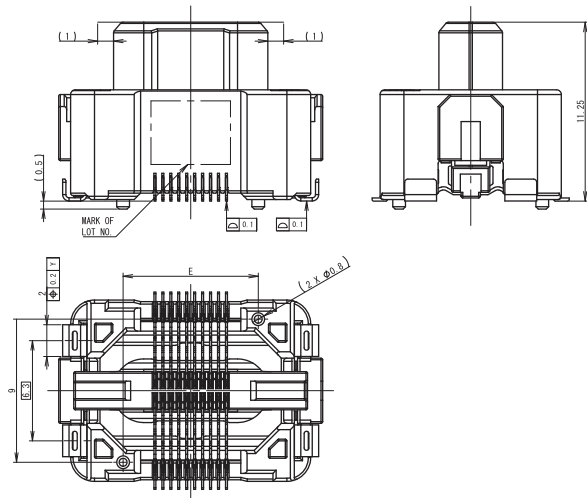
0.5mm ピッチ SMT フローティング  
0.5mm Pitch, SMT, Floating type

**FloXY<sup>®</sup> HS**

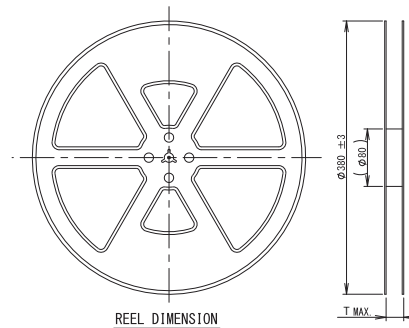
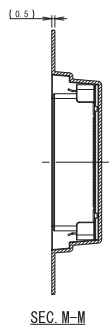
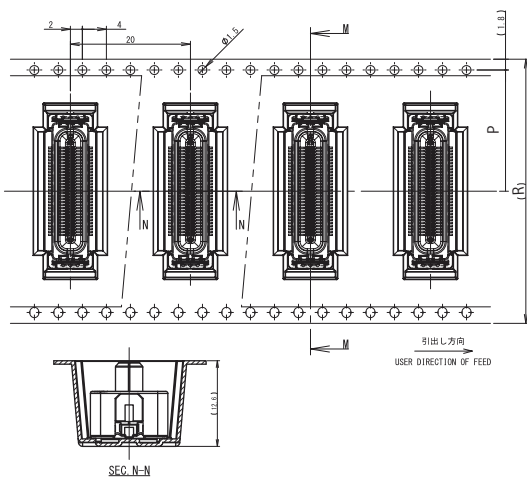
## ● Receptacle



No. of Pos.	A	B	C	D	E	F
20	16.6	4.5	11.7	12.5	8.5	16.1
30	19.1	7	14.2	15	11	18.6
40	21.6	9.5	16.7	17.5	13.5	21.1
50	24.1	12	19.2	20	16	23.6
60	26.6	14.5	21.7	22.5	18.5	26.1
70	29.1	17	24.2	25	21	28.6
80	31.6	19.5	26.7	27.5	23.5	31.1
90	34.1	22	29.2	30	26	33.6
100	36.6	24.5	31.7	32.5	28.5	36.1



## ● Packaging



No. of Pos.	R	P	T
20	32	14.2	38.4
30	44	20.2	50.4
40	44	20.2	50.4
50	44	20.2	50.4
60	44	20.2	50.4
70	44	20.2	50.4
80	56	26.2	62.4
90	56	26.2	62.4
100	56	26.2	62.4

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RoHS Compliant Product

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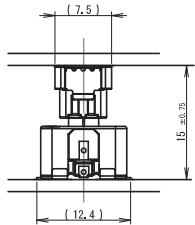
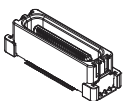
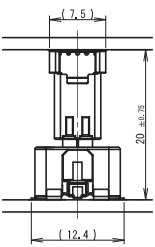
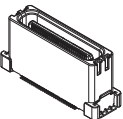
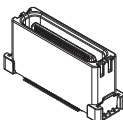
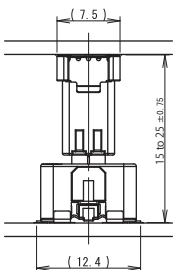
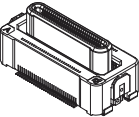
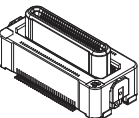


0.5mm Pitch  
5652 Series

0.5mm ピッチ SMT フローティング  
0.5mm Pitch, SMT, Floating type

**FloXY<sup>®</sup> HS**

注文コード/Ordering Code ※その他の嵌合高さについてはお問合せ下さい。  
For other stacking heights, please contact us.

	嵌合高さ Stacking Height	極数 No. of Positions	型番 Part No.	梱包数 Packing Quantity
Plug	15.0mm 	10 to 100Pins	 <b>14 5652 XXX 15X 829+T</b> 極数 4 : ボス無 Without boss No. of Pos. 5 : ボス有 With boss	550
	20.0mm 	60Pins	 <b>14 5652 060 20X 829+T</b> 0 : ボス無 Without boss 1 : ボス有 With boss	350
		10 to 100Pins Except 60Pins	 <b>14 5652 XXX 20X 829+T</b> 極数 4 : ボス無 Without boss No. of Pos. 5 : ボス有 With boss	350
Receptacle	15 to 20mm 	60Pins	 <b>24 5652 060 00X 829+T</b> 0 : ボス無 Without boss 1 : ボス有 With boss	350
		10 to 100Pins Except 60Pins	 <b>24 5652 XXX 00X 829+T</b> 極数 4 : ボス無 Without boss No. of Pos. 5 : ボス有 With boss	350