

0.5mm Fine Stack and Fine Mate Connectors

Product Facts

- Ultra fine, 0.5 [.020] pitch SMT connectors for board-to-board interconnections
- Low profile parallel board stacking heights as low as 1.5 [.059]
- Horizontal versions available for right angle board-to-board applications
- Surface areas provided to accommodate vacuum nozzles
- Available packaged in tape and reel for automatic placement per EIAJ standards
- Offered with tin or gold plating on mating surfaces
- Solder pegs are included for anti-peeling



Note: Fine Stack connectors are shown at the bottom; Fine Mate connectors are shown on top.

The Tyco Electronics 0.5mm Fine Stack and Fine Mate product lines are economical, surface-mount, ultra-fine pitch board-to-board connectors. Both product lines have been developed to meet the latest needs of the electronic industry for high density packaging.

These connectors offer a 0.5 [.020] contact pitch and parallel board stacking heights as low as 1.5 [.059] for Fine Stack connectors and ranging from 4.5 [.177] to 6.0 [.236] for Fine Mate connectors. They are ideally suited for applications requiring miniaturization, such as cellular phones, pagers, notebook computers, camcorders and other consumer electronics.

Both Fine Stack and Fine Mate connectors were designed for economical, automatic placement onto SMT printed circuit boards. The tab and receptacle designs include surface areas to accommodate “pick and place” vacuum nozzles without secondary covers. All products are “tape and reel” packaged, conforming to EIAJ standards.

0.5mm Fine Stack/Fine Mate Connectors

0.5mm Fine Stack Receptacles, 0.5 [.020] Pitch

1.5mm [.059"] Stacking Height

Material and Finish

Housing — 6T nylon, high heat resistant resin

Contacts — Phosphor bronze, plated gold over nickel

Solder Pegs — Copper alloy, plated tin

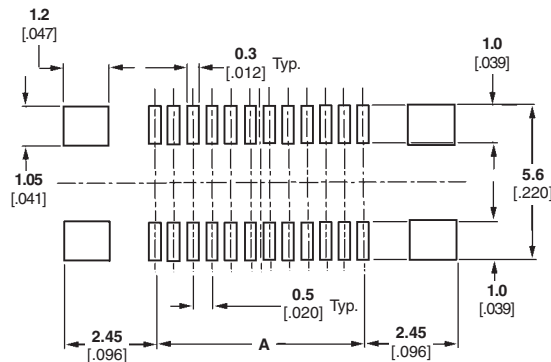
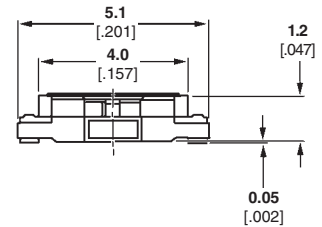
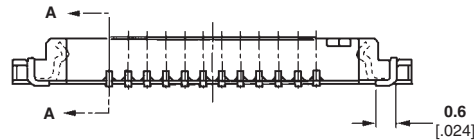
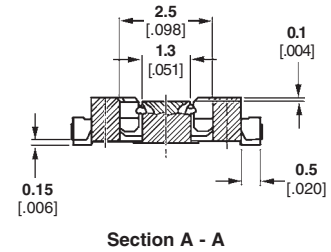
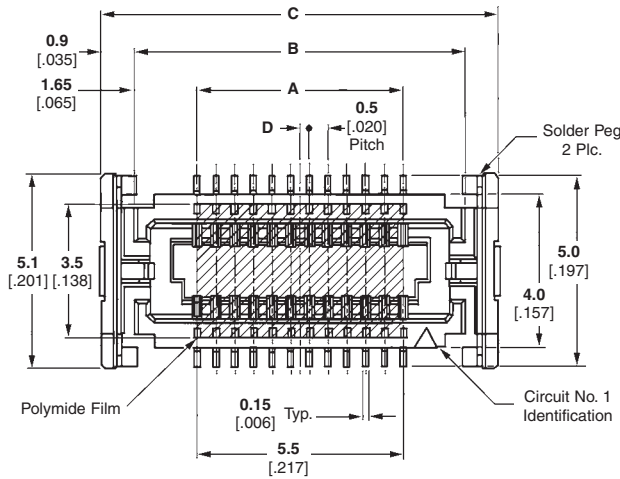
Related Product Data

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Product Specification

108-5546



Recommended PC Board Layout
(PC Board Thickness = 0.6 [.024] Min.)

No. of Positions	Dimensions				Keyed	Receptacle Part Number
	A	B	C	D		
20	4.5 .177	7.8 .307	9.6 .378	0.25 .010	Yes	2-5353512-0
30	7.0 .276	10.3 .406	12.1 .476	0.0	Yes	3-5353512-0
40	9.5 .374	12.8 .504	14.6 .575	0.25 .010	Yes	4-5353512-0
50	12.0 .472	15.3 .602	17.1 .673	0.0	No	5-5353159-0
60	14.5 .571	17.8 .701	19.6 .772	0.25 .010	No	6-5353159-0
70	17.0 .669	20.3 .799	22.1 .870	0.0	No	7-5353159-0
80	19.5 .768	22.8 .898	24.6 .969	0.25 .010	No	8-5353159-0

Note: Part Numbers are RoHS compliant.

0.5mm Fine Stack/Fine Mate Connectors

0.5mm Fine Stack Tabs (Plugs), 0.5 [.020] Pitch

1.5mm [.059"] Stacking Height

Material and Finish

Housing — 6T nylon, high heat resistant resin

Contacts — Phosphor bronze, plated gold over nickel

Solder Pegs — Copper alloy, plated tin

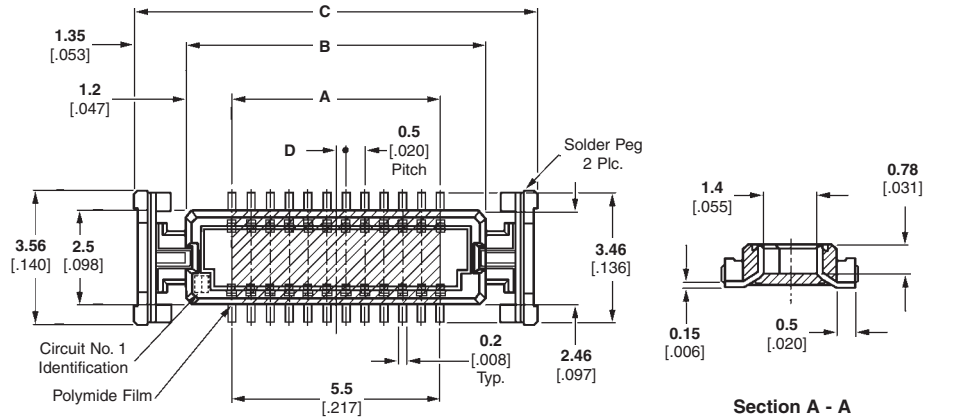
Related Product Data

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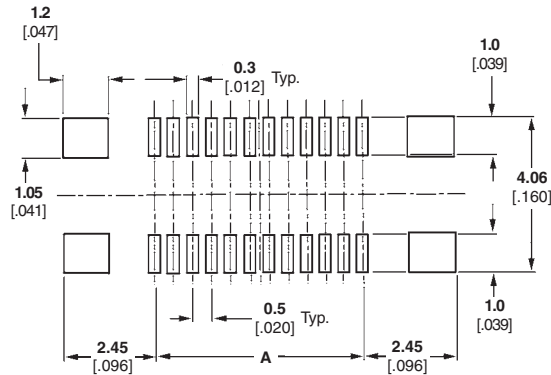
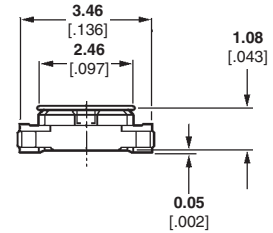
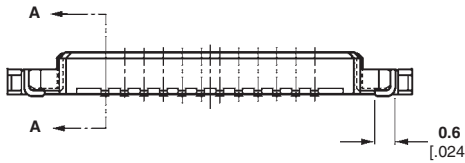
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Product Specification

108-5546



Section A - A



Recommended PC Board Layout
(PC Board Thickness = 0.6 [.024] Min.)

No. of Positions	Dimensions				Stacking Height	Keyed	Tab Part Number
	A	B	C	D			
20	4.5 .177	6.9 .272	9.6 .378	0.25 .010	1.5 .059	Yes	2-5353515-0
30	7.0 .276	9.4 .370	12.1 .476	0.0	1.5 .059	Yes	3-5353515-0
40	9.5 .374	11.9 .469	14.6 .575	0.25 .010	1.5 .059	Yes	4-5353515-0
50	12.0 .472	14.4 .567	17.1 .673	0.25 0.01	1.5 .059	No	5-5353164-0
60	14.5 .571	16.9 .665	19.6 .772	0.25 .010	1.5 .059	No	6-5353164-0
70	17.0 .669	19.4 .764	22.1 .870	0.0	1.5 .059	No	7-5353164-0
80	19.5 .768	21.9 .862	24.6 .969	0.25 .010	1.5 .059	No	8-5353164-0

Note: Part Numbers are RoHS compliant.

0.5mm Fine Mate Receptacles, 0.5 [.020] Pitch

4.0mm, 4.5mm, 5.5mm and 6.0mm Stacking Heights

Material and Finish

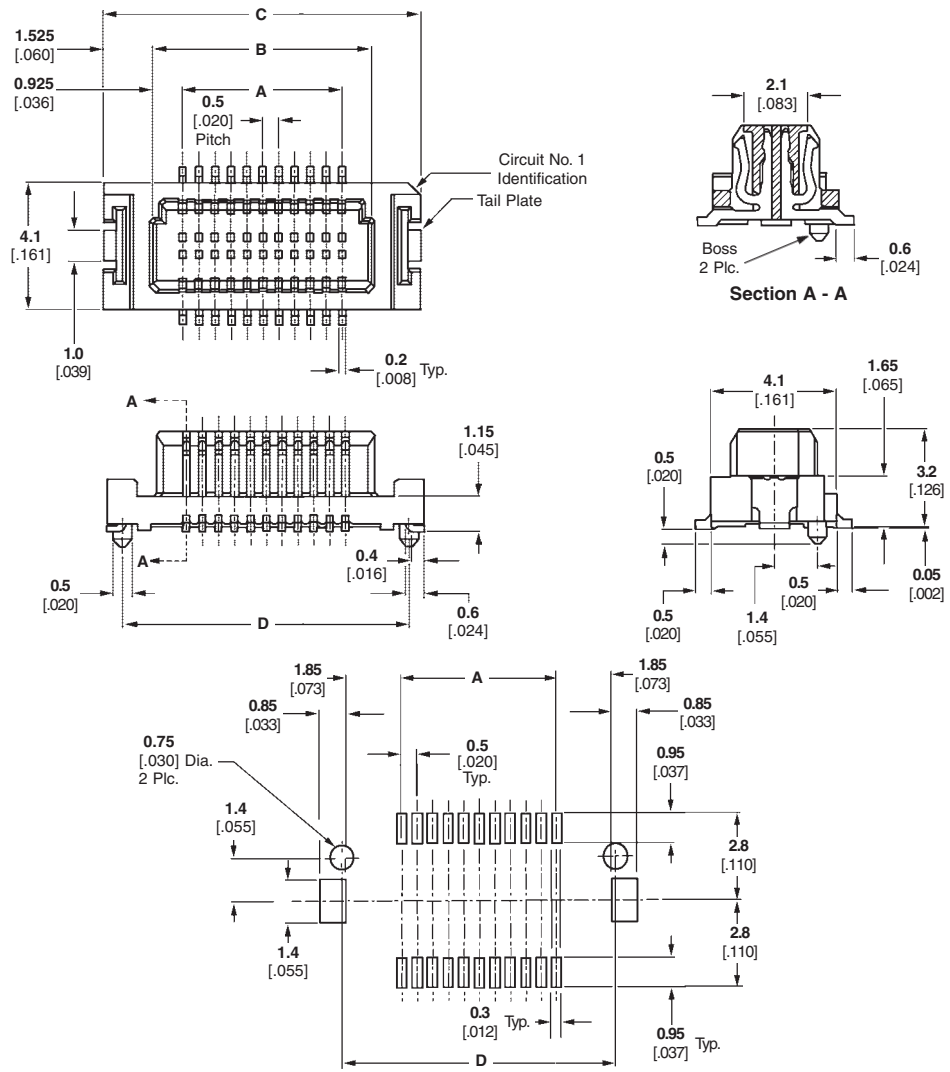
- Housing** — 6T nylon, high heat resistant resin
- Contacts** — Phosphor bronze, plated gold with entire contact underplated nickel
- Tail Plate** — Copper alloy, plated tin

Related Product Data

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Product Specification
108-5425



Recommended PC Board Layout
(PC Board Thickness = 0.6 [.024] Min.)

No. of Positions	Dimensions				Keyed	With Boss	Part Number
	A	B	C	D			
16	3.50	5.35	8.40	—	Yes	No	1-1747022-0
	.138	.211	.331	—			
20	4.50	5.75	8.80	—	No	No	1565357-9
	.177	.226	.346	—			
50	12.00	13.25	16.30	—	No	No	1565357-6
	.472	.522	.642	—			
60	14.50	15.75	18.80	—	No	No	1565357-5
	.571	.620	.740	17.85			
70	17.00	18.25	21.30	—	No	No	1565357-4
	.669	.719	.826	20.95			
80	19.50	21.35	24.40	—	No	Yes	5-1565357-3
				23.45			
				—	Yes	No	1747022-3
				23.45			
100	24.50	25.75	28.80	—	No	No	1565357-1
	.965	1.014	1.134	—			

Note: Part Numbers are RoHS compliant.

0.5mm Fine Stack/Fine Mate Connectors

0.5mm Fine Mate Vertical Tabs (Plugs), 0.5 [.020] Pitch

4.0mm, 4.5mm, 5.5mm and 6.0mm Stacking Heights

Material and Finish

Housing — 6T nylon, high heat resistant resin

Contacts — Phosphor bronze, plated gold with entire contact underplated nickel

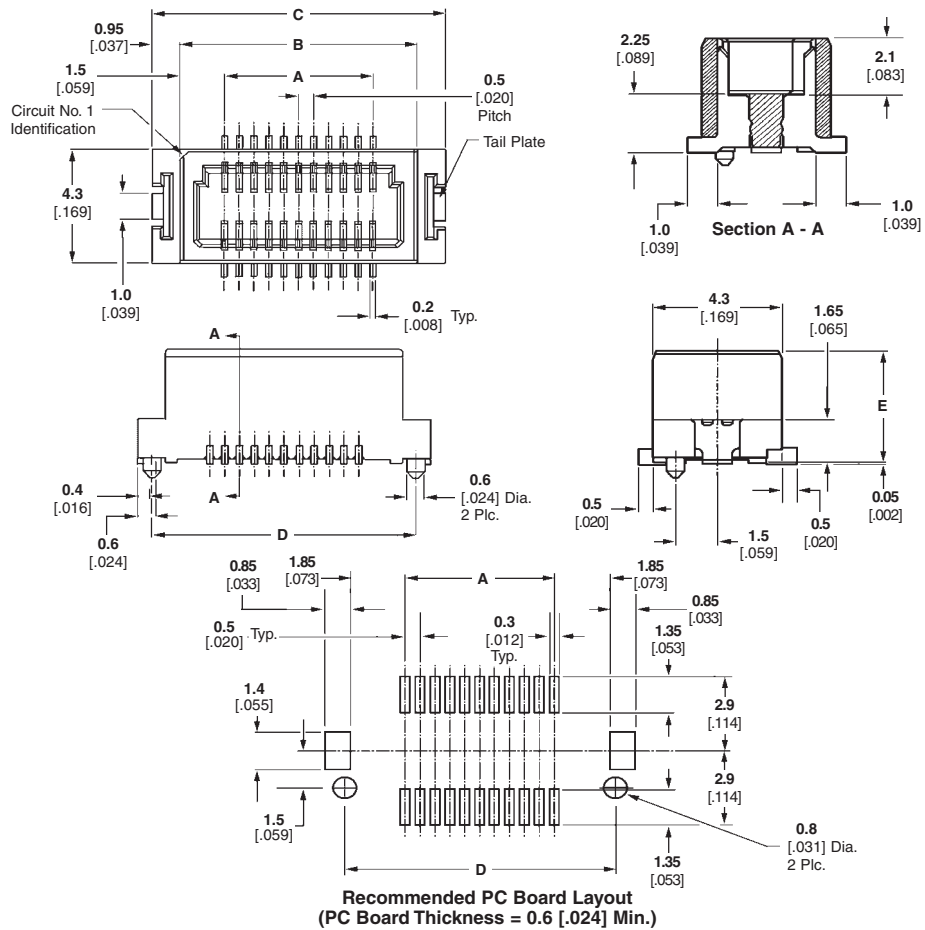
Tail Plate — Copper alloy, plated tin

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Mating Receptacles — page 16

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No. of Positions	Dimensions				Stack Height	Keyed	With Boss	Part Number
	A	B	C	D				
16	3.50	5.35	8.40	—	4.50	Yes	No	1-1747038-0
	.138	.211	.331	—	.177	—	—	—
20	4.50	5.75	8.80	—	4.50	Yes	No	1747038-9
	.177	.226	.346	—	.177	No	No	1565359-9
50	12.00	13.25	16.30	—	4.30	No	No	1747032-6
	.472	.522	.642	—	.217	No	No	1747035-6
60	14.50	15.75	18.80	17.85	4.00	No	Yes	5-1747028-5
	.571	.620	.740	.703	.157	No	No	1565359-5
70	17.00	18.25	21.30	—	4.30	No	No	1747032-5
	.669	.719	.826	—	.217	No	No	1747028-4
80	19.50	21.35	24.40	23.45	4.00	No	No	1747028-3
	.768	.841	.961	.923	.157	No	No	1565359-3
100	24.50	25.75	28.80	23.45	4.50	No	Yes	5-1565359-3
	.965	1.014	1.134	.923	.177	No	Yes	5-1747254-3
	—	—	—	—	4.80	No	No	1747035-3
	—	—	—	—	.236	No	No	1747028-1
	—	—	—	—	2.70	No	No	1747028-1
	—	—	—	—	.106	No	No	1565359-1

Note: Part Numbers are RoHS compliant.

0.5mm Fine Mate Right Angle Tabs (Plugs), 0.5 [.020] Pitch

4.0mm, 4.5mm, 5.5mm and 6.0mm Stacking Heights

Material and Finish

Housing — 6T nylon, high heat resistant resin

Contacts — Phosphor bronze, plated gold with entire contact underplated nickel

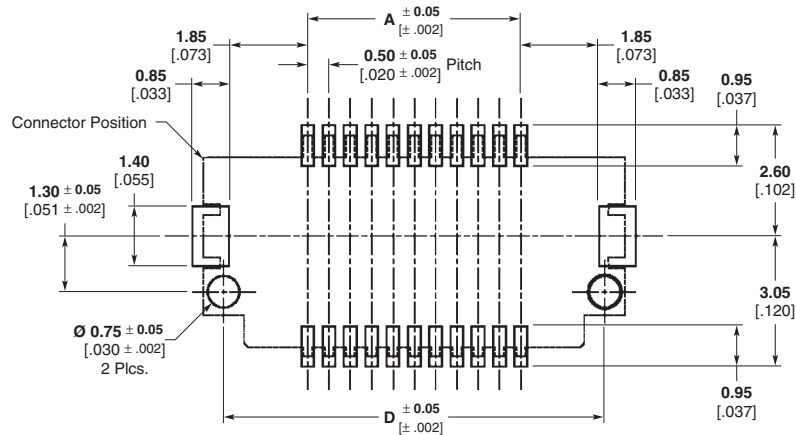
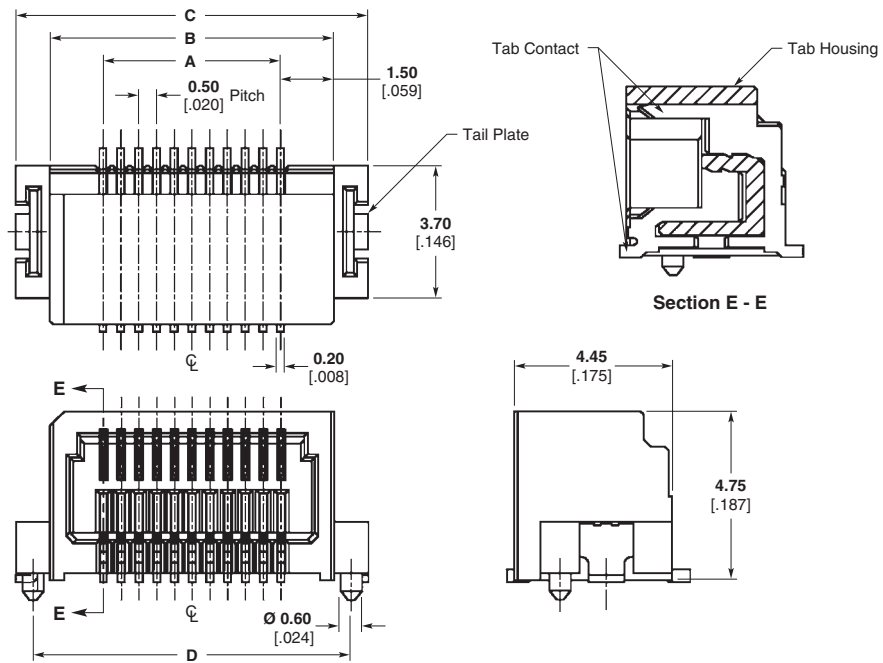
Tail Plate — Copper alloy, plated tin

Related Product Data

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Product Specification
108-5425



No. of Positions	Dimensions				Keyed	With Boss	Part Number
	A	B	C	D			
16	3.50 .138	5.35 .211	8.40 .331	—	Yes	No	1-1747257-0
20	4.50 .177	5.75 .226	8.80 .346	—	No	No	1747025-9
50	12.00 .472	13.25 .522	16.30 .642	—	No	No	1747025-6
60	14.50 .571	15.75 .620	18.80 .740	—	No	No	1747025-5
70	17.00 .669	18.25 .719	21.30 .826	—	No	No	1747025-4
				20.95 .825	No	Yes	5-1747025-4
80	19.50 .768	21.35 .841	24.40 .961	—	No	No	1747025-3
				23.45 .923	No	Yes	5-1747025-3
100	24.50 .965	25.75 1.014	28.80 1.134	—	No	No	1747025-1
				—	Yes	Yes	5-1747257-3

Note: Part Numbers are RoHS compliant.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.