

Product Facts

- Available in ZIF and non-ZIF
- Available in 0.3, 0.5, 1.0, and 1.25mm Centerlines
- Available Tin-Lead or Lead-Free
- SMT, Thu-Hole, Vertical and Right-Angle
- Right-Angle Available Top or Bottom Contact

Need more information?

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Technical Support is staffed with specialists well versed in Tyco Electronics products. They can provide you with:

- Technical support
- Catalogs
- Technical Documents
- Product Samples
- Authorized Distributor Locations



As the demands for higher-density packaging of electronic equipment increases, the use of flexible printed circuits (FPC) to reduce size, weight and assembly costs has expanded. FPC is finding wide acceptance in the computer industry, particularly in such applications as Lap Top, Notebook, Palm Top and Note Pad

Computers. Other markets include: Disk Drives, Printers, Plotters, Copiers, Cellular Phones, and Medical Equipment.

Tyco Electronics FPC connectors have been developed to meet the challenges of this expanding market. Available in centerline spacings 0.3 [.012], 0.5

[.020], 1.0 [.039], and 1.25 [.049] all incorporating low profile and light-weight features.

For custom parts, modification, or any inquiries, please contact your nearest Tyco Electronics Representatives or visit our website <http://www.tycoelectronics.com>

| Part Number | Pb Free Part Number | Pitch | ZIF | SMT / Thu-Hole | Vertical / Right-Angle | Contact Type | Circuit Range | Type A/B | Page Number |
|-------------|---------------------|-------|--------|----------------|------------------------|--------------|---------------|----------|-------------|
| 1746237 | 1746237 | 0.3 | ZIF | SMT | Right-Angle | Bottom | 27, 39 | A | 2 |
| 1470731 | 1734742 | 0.5 | ZIF | SMT | Vertical | — | 4 - 40P | A | 3 |
| 1470359 | 1734839 | 0.5 | ZIF | SMT | Right-Angle | Top | 5 - 50P | Inline | 4 & 5 |
| 1470360 | 1734592 | 0.5 | ZIF | SMT | Right-Angle | Bottom | 5 - 50P | Inline | 6 & 7 |
| 440347 | 1734248 | 1.0 | ZIF | SMT | Vertical | — | 3 - 40P | 2 Row | 8 & 9 |
| 487951 | 84953 | 1.0 | ZIF | SMT | Right-Angle | Top | 4 - 30P | Inline | 10 & 11 |
| 487952 | 84952 | 1.0 | ZIF | SMT | Right-Angle | Bottom | 4 - 30P | Inline | 12 & 13 |
| 84982 | 84982 | 1.0 | NonZIF | SMT | Vertical | — | 4 - 40P | A | 14 & 15 |
| 84981 | 84981 | 1.0 | NonZIF | SMT | Right-Angle | Top | 4 - 40P | Inline | 16 & 17 |
| 1470852 | 1734798 | 1.0 | NonZIF | SMT | Right-Angle | Bottom | 4 - 30P | Inline | 18 & 19 |
| 84984 | 84984 | 1.0 | NonZIF | Thu-Hole | Vertical | — | 4 - 40P | A | 20 & 21 |
| 84983 | 84983 | 1.0 | NonZIF | Thu-Hole | Right-Angle | Top | 4 - 40P | A | 22 & 23 |
| 1470790 | 1734779 | 1.0 | NonZIF | Thu-Hole | Right-Angle | Bottom | 4 - 30P | B | 24 & 25 |
| 84534 | 84534 | 1.25 | NonZIF | Thu-Hole | Vertical | — | 4 - 40P | A | 26 & 27 |
| 84533 | 84533 | 1.25 | NonZIF | Thu-Hole | Right-Angle | Top | 4 - 40P | A | 28 & 29 |

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Product Dimensions

**0.3 mm, FPC Connector,
Flip Lock Type**

Part Number: 1746237

Material and Finish

Housing — Thermoplastic, UL 94V-0

Contacts — Phosphor bronze

Technical Documents

Product Specification — 108-5924



Recommended PCB Layout

Product Dimensions (Continued)

**0.5 mm, FPC/FFC
Connector, ZIF, Vertical,
SMT, Type A**

**Part Number 1470731
Lead Free 1734742**

Material and Finish

Housing — High temperature thermo-
plastic, UL 94V-0, brown color

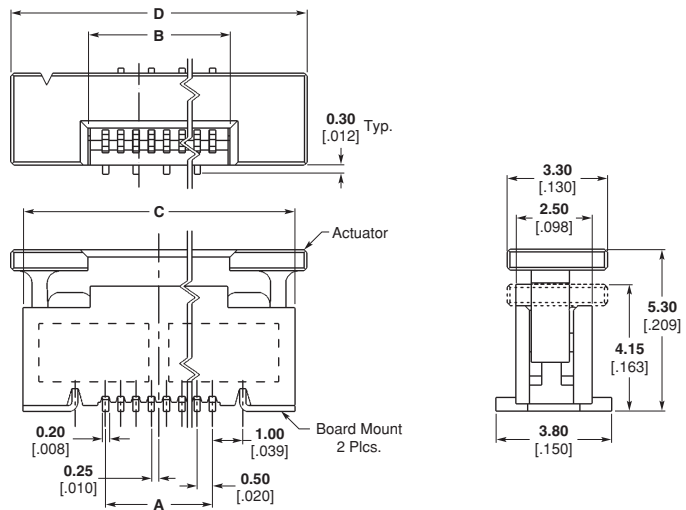
Actuator — High temperature thermo-
plastic, UL 94V-0, natural color

Contacts — Phosphor bronze

Board Mounts — Brass

Technical Documents

Product Specification — 108-57324



Recommended FFC Layout

Recommended FPC Layout



Recommended PCB Layout

| Part Number | No. of Contacts | Dimension | | | |
|-------------|-----------------|---------------|---------------|----------------|----------------|
| | | A | B | C | D |
| 1-1470731-6 | 16 | 7.50 .295 | 8.65 .341 | 12.90 .508 | 13.70 .539 |
| 1-1470731-8 | 18 | 8.50 .335 | 9.65 .380 | 13.90 .547 | 14.70 .579 |
| 2-1470731-0 | 20 | 9.50 .374 | 10.65 .419 | 14.90 .587 | 15.70 .618 |
| 2-1470731-4 | 24 | 11.50 .453 | 12.65 .498 | 16.90 .665 | 17.70 .697 |
| 3-1470731-0 | 30 | 14.50 .571 | 15.65 .616 | 19.90 .783 | 20.70 .815 |
| 4-1470731-0 | 40 | 19.50 .768 | 20.65 .813 | 25.90 1.020 | 25.70 1.012 |

Product Dimensions (Continued)

**0.5 mm, FPC Connector,
SMT, Top Contact**

Part Number 1470359
Lead Free 1734839

Material and Finish

Housing — High temperature thermo-
plastic, UL 94V-0, natural color

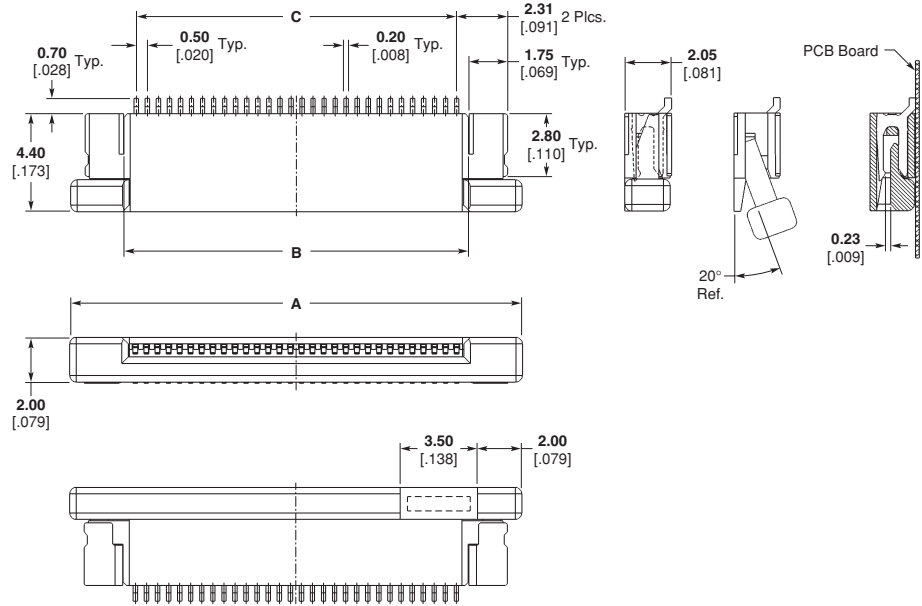
Actuator — Thermoplastic, UL 94V-0,
ivory color

Hold Down — Phosphor bronze

Contact — Phosphor bronze

Technical Documents

Product Specification — 108-57238



Recommended FPC Layout



Recommended PCB Layout

Product Dimensions (Continued)

**0.5 mm, FPC Connector,
SMT, Top Contact**

**Part Number 1470359
Lead Free 1734839**

| Part Number | Position | Dimension | | |
|-------------|----------|---------------|---------------|---------------|
| | | A | B | C |
| 1470359-5 | 5 | 7.93 .312 | 3.10 .122 | 2.00 .078 |
| 1470359-6 | 6 | 8.43 .331 | 3.60 .141 | 2.50 .098 |
| 1470359-7 | 7 | 8.93 .351 | 4.10 .161 | 3.00 .118 |
| 1470359-8 | 8 | 9.43 .371 | 4.60 .181 | 3.50 .137 |
| 1470359-9 | 9 | 9.93 .390 | 5.10 .200 | 4.00 .157 |
| 1-1470359-0 | 10 | 10.43 .410 | 5.60 .220 | 4.50 .177 |
| 1-1470359-1 | 11 | 10.93 .430 | 6.10 .240 | 5.00 .196 |
| 1-1470359-2 | 12 | 11.43 .450 | 6.60 .259 | 5.50 .216 |
| 1-1470359-3 | 13 | 11.93 .469 | 7.10 .279 | 6.00 .236 |
| 1-1470359-4 | 14 | 12.43 .489 | 7.60 .299 | 6.50 .255 |
| 1-1470359-5 | 15 | 12.93 .509 | 8.10 .318 | 7.00 .275 |
| 1-1470359-6 | 16 | 13.43 .528 | 8.60 .338 | 7.50 .295 |
| 1-1470359-7 | 17 | 13.93 .548 | 9.10 .358 | 8.00 .314 |
| 1-1470359-8 | 18 | 14.43 .568 | 9.60 .377 | 8.50 .334 |
| 1-1470359-9 | 19 | 14.93 .587 | 10.10 .397 | 9.00 .354 |
| 2-1470359-0 | 20 | 15.43 .607 | 10.60 .417 | 9.50 .374 |
| 2-1470359-1 | 21 | 15.93 .627 | 11.10 .437 | 10.00 .393 |
| 2-1470359-2 | 22 | 16.43 .646 | 11.60 .456 | 10.50 .413 |
| 2-1470359-3 | 23 | 16.93 .666 | 12.10 .476 | 11.00 .433 |
| 2-1470359-4 | 24 | 17.43 .686 | 12.60 .496 | 11.50 .452 |
| 2-1470359-5 | 25 | 17.93 .705 | 13.10 .515 | 12.00 .472 |
| 2-1470359-6 | 26 | 18.43 .725 | 13.60 .535 | 12.50 .492 |
| 2-1470359-7 | 27 | 18.93 .745 | 14.10 .555 | 13.00 .511 |

| Part Number | Position | Dimension | | |
|-------------|----------|----------------|----------------|---------------|
| | | A | B | C |
| 2-1470359-8 | 28 | 19.43 .764 | 14.60 .574 | 13.50 .531 |
| 2-1470359-9 | 29 | 19.93 .784 | 15.10 .594 | 14.00 .551 |
| 3-1470359-0 | 30 | 20.43 .804 | 15.60 .614 | 14.50 .570 |
| 3-1470359-1 | 31 | 20.93 .824 | 16.10 .633 | 15.00 .590 |
| 3-1470359-2 | 32 | 21.43 .843 | 16.60 .653 | 15.50 .610 |
| 3-1470359-3 | 33 | 21.93 .863 | 17.10 .673 | 16.00 .629 |
| 3-1470359-4 | 34 | 22.43 .883 | 17.60 .692 | 16.50 .649 |
| 3-1470359-5 | 35 | 22.93 .902 | 18.10 .712 | 17.00 .669 |
| 3-1470359-6 | 36 | 23.43 .922 | 18.60 .732 | 17.50 .688 |
| 3-1470359-7 | 37 | 23.93 .942 | 19.10 .751 | 18.00 .708 |
| 3-1470359-8 | 38 | 24.43 .961 | 19.60 .771 | 18.50 .728 |
| 3-1470359-9 | 39 | 24.93 .981 | 20.10 .791 | 19.00 .748 |
| 4-1470359-0 | 40 | 25.43 1.001 | 20.60 .811 | 19.50 .767 |
| 4-1470359-1 | 41 | 25.93 1.020 | 21.10 .830 | 20.00 .787 |
| 4-1470359-2 | 42 | 26.43 1.040 | 21.60 .850 | 20.50 .807 |
| 4-1470359-3 | 43 | 26.93 1.060 | 22.10 .870 | 21.00 .826 |
| 4-1470359-4 | 44 | 27.43 1.079 | 22.60 .890 | 21.50 .846 |
| 4-1470359-5 | 45 | 27.93 1.099 | 23.10 .909 | 22.00 .866 |
| 4-1470359-6 | 46 | 28.43 1.119 | 23.60 .929 | 22.50 .885 |
| 4-1470359-7 | 47 | 28.93 1.138 | 24.10 .949 | 23.00 .905 |
| 4-1470359-8 | 48 | 29.43 1.158 | 24.60 .968 | 23.50 .925 |
| 4-1470359-9 | 49 | 29.93 1.178 | 25.10 .988 | 24.00 .944 |
| 5-1470359-0 | 50 | 30.43 1.198 | 25.60 1.008 | 24.50 .964 |

Product Dimensions (Continued)

0.5 mm, FPC Connector, SMT, Bottom Contact

Part Number 1470360
Lead Free 1734592

Material and Finish

Housing — High temperature thermoplastic, UL 94V-0, natural color

Actuator — Thermoplastic, UL 94V-0, ivory color

Hold Down — Phosphor bronze

Contact — Phosphor bronze

Technical Documents

Product Specification — 108-57238



Recommended FPC Layout



Recommended PCB Layout

Product Dimensions (Continued)

**0.5 mm, FPC Connector,
SMT, Bottom Contact**

**Part Number 1470360
Lead Free 1734592**

| Part Number | Position | Dimension | | |
|-------------|----------|---------------|---------------|---------------|
| | | A | B | C |
| 1470360-5 | 5 | 7.93 .312 | 3.10 .122 | 2.00 .078 |
| 1470360-6 | 6 | 8.43 .331 | 3.60 .141 | 2.50 .098 |
| 1470360-7 | 7 | 8.93 .351 | 4.10 .161 | 3.00 .118 |
| 1470360-8 | 8 | 9.43 .371 | 4.60 .181 | 3.50 .137 |
| 1470360-9 | 9 | 9.93 .390 | 5.10 .200 | 4.00 .157 |
| 1-1470360-0 | 10 | 10.43 .410 | 5.60 .220 | 4.50 .177 |
| 1-1470360-1 | 11 | 10.93 .430 | 6.10 .240 | 5.00 .196 |
| 1-1470360-2 | 12 | 11.43 .450 | 6.60 .259 | 5.50 .216 |
| 1-1470360-3 | 13 | 11.93 .469 | 7.10 .279 | 6.00 .236 |
| 1-1470360-4 | 14 | 12.43 .489 | 7.60 .299 | 6.50 .255 |
| 1-1470360-5 | 15 | 12.93 .509 | 8.10 .318 | 7.00 .275 |
| 1-1470360-6 | 16 | 13.43 .528 | 8.60 .338 | 7.50 .295 |
| 1-1470360-7 | 17 | 13.93 .548 | 9.10 .358 | 8.00 .314 |
| 1-1470360-8 | 18 | 14.43 .568 | 9.60 .377 | 8.50 .334 |
| 1-1470360-9 | 19 | 14.93 .587 | 10.10 .397 | 9.00 .354 |
| 2-1470360-0 | 20 | 15.43 .607 | 10.60 .417 | 9.50 .374 |
| 2-1470360-1 | 21 | 15.93 .627 | 11.10 .437 | 10.00 .393 |
| 2-1470360-2 | 22 | 16.43 .646 | 11.60 .456 | 10.50 .413 |
| 2-1470360-3 | 23 | 16.93 .666 | 12.10 .476 | 11.00 .433 |
| 2-1470360-4 | 24 | 17.43 .686 | 12.60 .496 | 11.50 .452 |
| 2-1470360-5 | 25 | 17.93 .705 | 13.10 .515 | 12.00 .472 |
| 2-1470360-6 | 26 | 18.43 .725 | 13.60 .535 | 12.50 .492 |
| 2-1470360-7 | 27 | 18.93 .745 | 14.10 .555 | 13.00 .511 |

| Part Number | Position | Dimension | | |
|-------------|----------|----------------|----------------|---------------|
| | | A | B | C |
| 2-1470360-8 | 28 | 19.43 .764 | 14.60 .574 | 13.50 .531 |
| 2-1470360-9 | 29 | 19.93 .784 | 15.10 .594 | 14.00 .551 |
| 3-1470360-0 | 30 | 20.43 .804 | 15.60 .614 | 14.50 .570 |
| 3-1470360-1 | 31 | 20.93 .824 | 16.10 .633 | 15.00 .590 |
| 3-1470360-2 | 32 | 21.43 .843 | 16.60 .653 | 15.50 .610 |
| 3-1470360-3 | 33 | 21.93 .863 | 17.10 .673 | 16.00 .629 |
| 3-1470360-4 | 34 | 22.43 .883 | 17.60 .692 | 16.50 .649 |
| 3-1470360-5 | 35 | 22.93 .902 | 18.10 .712 | 17.00 .669 |
| 3-1470360-6 | 36 | 23.43 .922 | 18.60 .732 | 17.50 .688 |
| 3-1470360-7 | 37 | 23.93 .942 | 19.10 .751 | 18.00 .708 |
| 3-1470360-8 | 38 | 24.43 .961 | 19.60 .771 | 18.50 .728 |
| 3-1470360-9 | 39 | 24.93 .981 | 20.10 .791 | 19.00 .748 |
| 4-1470360-0 | 40 | 25.43 1.001 | 20.60 .811 | 19.50 .767 |
| 4-1470360-1 | 41 | 25.93 1.020 | 21.10 .830 | 20.00 .787 |
| 4-1470360-2 | 42 | 26.43 1.040 | 21.60 .850 | 20.50 .807 |
| 4-1470360-3 | 43 | 26.93 1.060 | 22.10 .870 | 21.00 .826 |
| 4-1470360-4 | 44 | 27.43 1.079 | 22.60 .890 | 21.50 .846 |
| 4-1470360-5 | 45 | 27.93 1.099 | 23.10 .909 | 22.00 .866 |
| 4-1470360-6 | 46 | 28.43 1.119 | 23.60 .929 | 22.50 .885 |
| 4-1470360-7 | 47 | 28.93 1.138 | 24.10 .949 | 23.00 .905 |
| 4-1470360-8 | 48 | 29.43 1.158 | 24.60 .968 | 23.50 .925 |
| 4-1470360-9 | 49 | 29.93 1.178 | 25.10 .988 | 24.00 .944 |
| 5-1470360-0 | 50 | 30.43 1.198 | 25.60 1.008 | 24.50 .964 |

Product Dimensions (Continued)

**1.0 mm, FPC Connector,
ZIF Vertical, SMT**

Part Number 440347
Lead Free 1734248

Material and Finish

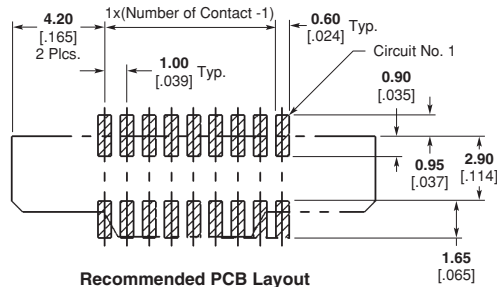
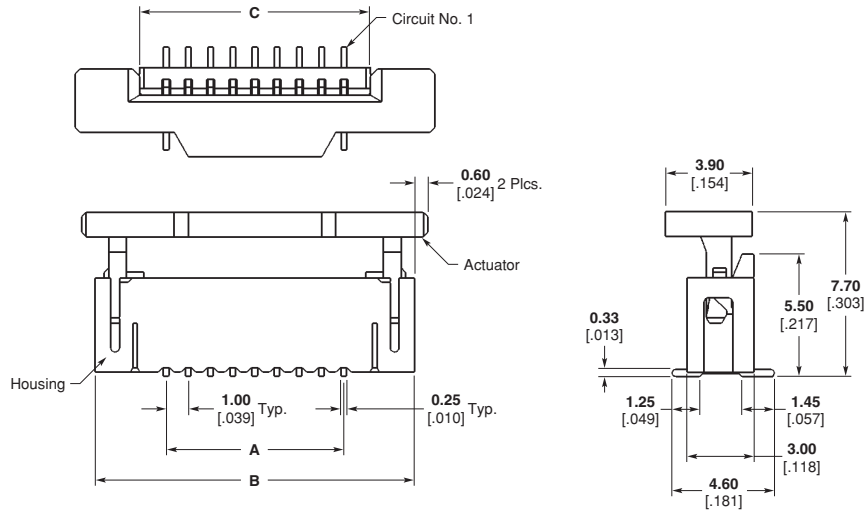
Housing — Thermoplastic, UL 94V-0, black color

Actuator — PPS, UL 94V-0, brown color

Contact — Phosphor bronze

Technical Documents

Product Specification — 108-57080



Product Dimensions (Continued)

**1.0 mm, FPC Connector,
ZIF Vertical, SMT**

**Part Number 440347
Lead Free 1734248**

| Part Number | Position | Dimension | | |
|-------------|----------|---------------|----------------|---------------|
| | | A | B | C |
| 440347-3 | 3 | 2.00 .078 | 8.60 .338 | 4.40 .173 |
| 440347-4 | 4 | 3.00 .118 | 9.60 .377 | 5.40 .212 |
| 440347-5 | 5 | 4.00 .157 | 10.60 .417 | 6.40 .251 |
| 440347-6 | 6 | 5.00 .197 | 11.60 .456 | 7.40 .291 |
| 440347-7 | 7 | 6.00 .236 | 12.60 .496 | 8.40 .330 |
| 440347-8 | 8 | 7.00 .276 | 13.60 .535 | 9.40 .370 |
| 440347-9 | 9 | 8.00 .315 | 14.60 .574 | 10.40 .409 |
| 440347-0 | 10 | 9.00 .354 | 15.60 .614 | 11.40 .448 |
| 1-440347-1 | 11 | 10.00 .394 | 16.60 .653 | 12.40 .488 |
| 1-440347-2 | 12 | 11.00 .433 | 17.60 .692 | 13.40 .527 |
| 1-440347-3 | 13 | 12.00 .472 | 18.60 .732 | 14.40 .566 |
| 1-440347-4 | 14 | 13.00 .512 | 19.60 .771 | 15.40 .606 |
| 1-440347-5 | 15 | 14.00 .551 | 20.60 .811 | 16.40 .645 |
| 1-440347-6 | 16 | 15.00 .591 | 21.60 .850 | 17.40 .685 |
| 1-440347-7 | 17 | 16.00 .630 | 22.60 .889 | 18.40 .724 |
| 1-440347-8 | 18 | 17.00 .669 | 23.60 .929 | 19.40 .763 |
| 1-440347-9 | 19 | 18.00 .709 | 24.60 .968 | 20.40 .803 |
| 2-440347-0 | 20 | 19.00 .748 | 25.60 1.007 | 21.40 .842 |
| 2-440347-1 | 21 | 20.00 .787 | 26.60 1.047 | 22.40 .881 |

| Part Number | Position | Dimension | | |
|-------------|----------|----------------|----------------|----------------|
| | | A | B | C |
| 2-440347-2 | 22 | 21.00 .827 | 27.60 1.086 | 23.40 .921 |
| 2-440347-3 | 23 | 22.00 .866 | 28.60 1.125 | 24.40 .960 |
| 2-440347-4 | 24 | 23.00 .906 | 29.60 1.165 | 25.40 1.000 |
| 2-440347-5 | 25 | 24.00 .945 | 30.60 1.204 | 26.40 1.039 |
| 2-440347-6 | 26 | 25.00 .984 | 31.60 1.244 | 27.40 1.078 |
| 2-440347-7 | 27 | 26.00 1.024 | 32.60 1.283 | 28.40 1.118 |
| 2-440347-8 | 28 | 27.00 1.063 | 33.60 1.322 | 29.40 1.157 |
| 2-440347-9 | 29 | 28.00 1.102 | 34.60 1.362 | 30.40 1.196 |
| 3-440347-0 | 30 | 29.00 1.142 | 35.60 1.401 | 31.40 1.236 |
| 3-440347-1 | 31 | 30.00 1.181 | 36.60 1.440 | 32.40 1.275 |
| 3-440347-2 | 32 | 31.00 1.221 | 37.60 1.480 | 33.40 1.314 |
| 3-440347-3 | 33 | 32.00 1.259 | 38.60 1.519 | 34.40 1.354 |
| 3-440347-4 | 34 | 33.00 1.299 | 39.60 1.559 | 35.40 1.393 |
| 3-440347-5 | 35 | 34.00 1.338 | 40.60 1.598 | 36.40 1.433 |
| 3-440347-6 | 36 | 35.00 1.377 | 41.60 1.637 | 37.40 1.472 |
| 3-440347-7 | 37 | 36.00 1.417 | 42.60 1.677 | 38.40 1.511 |
| 3-440347-8 | 38 | 37.00 1.456 | 43.60 1.716 | 39.40 1.551 |
| 3-440347-9 | 39 | 38.00 1.496 | 44.60 1.755 | 40.40 1.590 |
| 4-440347-0 | 40 | 39.00 1.535 | 45.60 1.795 | 41.40 1.629 |

Product Dimensions (Continued)

**1.0 mm, FPC Connector,
Right Angle, SMT, Top
Contact**

Part Number 487951
Lead Free 84953

Material and Finish

Housing — Glass reinforced polyester (LCP), UL 94V-0, natural color

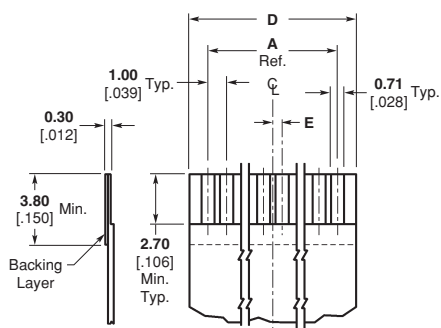
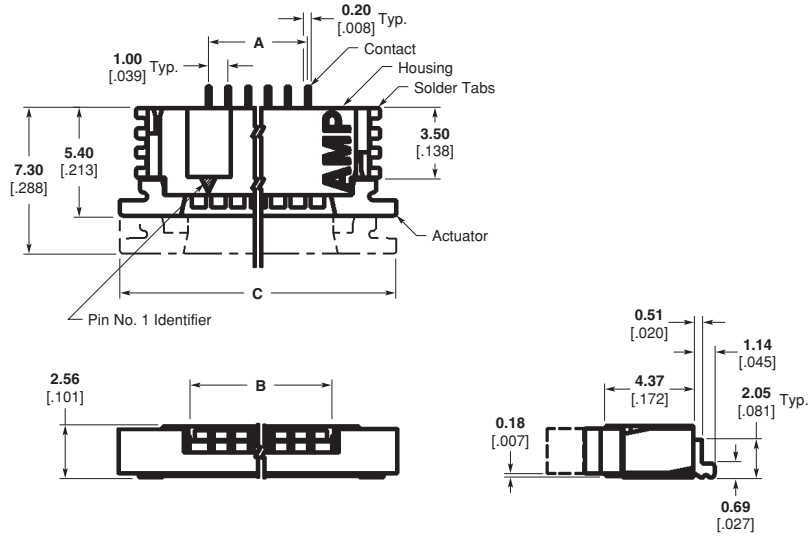
Actuator — Glass reinforced nylon (PPA), UL 94V-0, or glass reinforced PPS, UL 94V-0, black color

Solder Tabs — Phosphor bronze

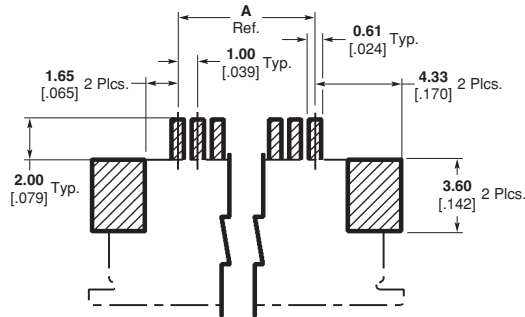
Contact — Phosphor bronze

Technical Documents

Product Specification — 108-1393



Recommended FPC Layout



Recommended PCB Layout

1.0 mm, FPC Connector,
Right Angle, SMT, Top
Contact

Part Number **487951**
Lead Free **84953**

Technical Documents
Product Specification — 108-1393

Product Dimensions (Continued)

| Part Number | Positions | Dimension | | | | |
|-------------|-----------|----------------|----------------|----------------|----------------|--------------|
| | | A | B | C | D | E |
| 84953-4 | 4 | 3.00 .118 | 5.18 .204 | 11.92 .469 | 5.00 .197 | 0.50 .019 |
| 84953-5 | 5 | 4.00 .157 | 6.18 .243 | 12.92 .509 | 6.00 .236 | — |
| 84953-6 | 6 | 5.00 .197 | 7.18 .283 | 13.92 .548 | 7.00 .276 | 0.50 .019 |
| 84953-7 | 7 | 6.00 .236 | 8.18 .322 | 14.92 .587 | 8.00 .315 | — |
| 84953-8 | 8 | 7.00 .276 | 9.18 .361 | 15.92 .627 | 9.00 .354 | 0.50 .019 |
| 84953-9 | 9 | 8.00 .315 | 10.18 .401 | 16.92 .666 | 10.00 .394 | — |
| 1-84953-0 | 10 | 9.00 .354 | 11.18 .440 | 17.92 .705 | 11.00 .433 | 0.50 .019 |
| 1-84953-1 | 11 | 10.00 .394 | 12.18 .480 | 18.92 .745 | 12.00 .472 | — |
| 1-84953-2 | 12 | 11.00 .433 | 13.18 .519 | 19.92 .784 | 13.00 .512 | 0.50 .019 |
| 1-84953-3 | 13 | 12.00 .472 | 14.18 .558 | 20.92 .824 | 14.00 .551 | — |
| 1-84953-4 | 14 | 13.00 .512 | 15.18 .598 | 21.92 .863 | 15.00 .591 | 0.50 .019 |
| 1-84953-5 | 15 | 14.00 .551 | 16.18 .637 | 22.92 .902 | 16.00 .630 | — |
| 1-84953-6 | 16 | 15.00 .591 | 17.18 .676 | 23.92 .942 | 17.00 .669 | 0.50 .019 |
| 1-84953-7 | 17 | 16.00 .630 | 18.18 .716 | 24.92 .981 | 18.00 .709 | — |
| 1-84953-8 | 18 | 17.00 .669 | 19.18 .755 | 25.92 1.020 | 19.00 .748 | 0.50 .019 |
| 1-84953-9 | 19 | 18.00 .709 | 20.18 .794 | 26.92 1.060 | 20.00 .787 | — |
| 2-84953-0 | 20 | 19.00 .748 | 21.18 .834 | 27.92 1.099 | 21.00 .827 | 0.50 .019 |
| 2-84953-1 | 21 | 20.00 .787 | 22.18 .873 | 28.92 1.139 | 22.00 .866 | — |
| 2-84953-2 | 22 | 21.00 .827 | 23.18 .913 | 29.92 1.179 | 23.00 .906 | 0.50 .019 |
| 2-84953-3 | 23 | 22.00 .866 | 24.18 .952 | 30.92 1.217 | 24.00 .945 | — |
| 2-84953-4 | 24 | 23.00 .906 | 25.18 .991 | 31.92 1.257 | 25.00 .984 | 0.50 .019 |
| 2-84953-5 | 25 | 24.00 .945 | 26.18 1.031 | 32.92 1.296 | 26.00 1.024 | — |
| 2-84953-6 | 26 | 25.00 .984 | 27.18 1.070 | 33.92 1.335 | 27.00 1.063 | 0.50 .019 |
| 2-84953-7 | 27 | 26.00 1.024 | 28.18 1.109 | 34.92 1.375 | 28.00 1.102 | — |
| 2-84953-8 | 28 | 27.00 1.063 | 29.18 1.149 | 35.92 1.414 | 29.00 1.142 | 0.50 .019 |
| 2-84953-9 | 29 | 28.00 1.102 | 30.18 1.188 | 36.92 1.454 | 30.00 1.181 | — |
| 3-84953-0 | 30 | 29.00 1.142 | 31.18 1.228 | 37.92 1.492 | 31.00 1.221 | 0.50 .019 |

Product Dimensions (Continued)

1.0 mm, FPC Connector, Right Angle, SMT, Bottom Contact

Part Number 487952
Lead Free 84952

Material and Finish

Housing — Glass reinforced polyester (LCP), UL 94V-0, natural color

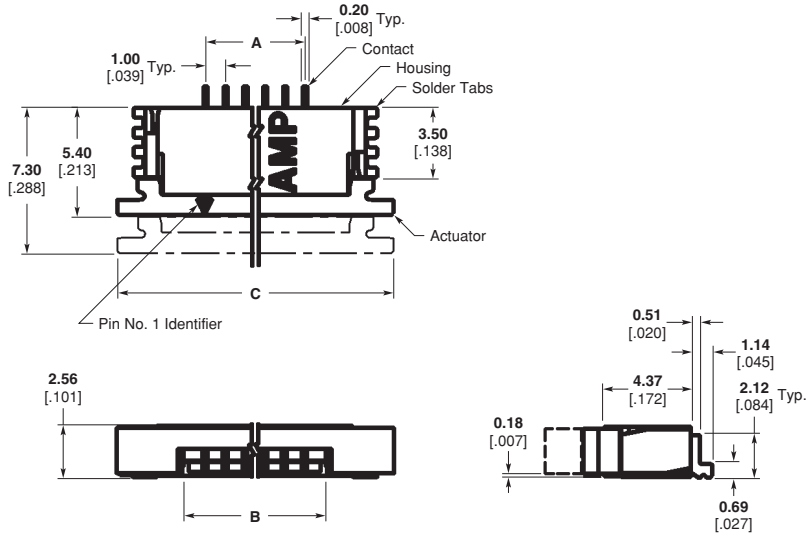
Actuator — Glass reinforced nylon (PPA), UL 94V-0, or glass reinforced PPS, UL 94V-0, black color

Solder Tabs — Phosphor bronze

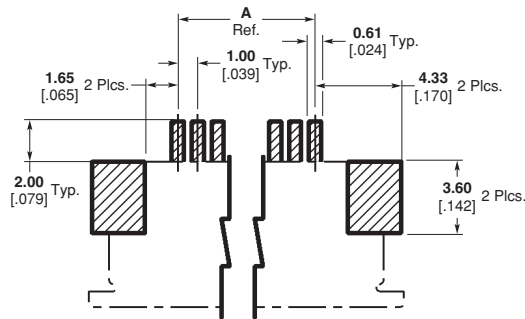
Contact — Phosphor bronze

Technical Documents

Product Specification — 108-1393



Recommended FPC Layout



Recommended PCB Layout

1.0 mm, FPC Connector,
Right Angle, SMT, Bottom
Contact

Part Number 487952
Lead Free 84952

Technical Documents
Product Specification — 108-1393

Product Dimensions (Continued)

| Part Number | Positions | Dimension | | | | |
|-------------|-----------|----------------|----------------|----------------|----------------|--------------|
| | | A | B | C | D | E |
| 84952-4 | 4 | 3.00 .118 | 5.18 .204 | 11.92 .469 | 5.00 .197 | 0.50 .019 |
| 84952-5 | 5 | 4.00 .157 | 6.18 .243 | 12.92 .509 | 6.00 .236 | — |
| 84952-6 | 6 | 5.00 .197 | 7.18 .283 | 13.92 .548 | 7.00 .276 | 0.50 .019 |
| 84952-7 | 7 | 6.00 .236 | 8.18 .322 | 14.92 .587 | 8.00 .315 | — |
| 84952-8 | 8 | 7.00 .276 | 9.18 .361 | 15.92 .627 | 9.00 .354 | 0.50 .019 |
| 84952-9 | 9 | 8.00 .315 | 10.18 .401 | 16.92 .666 | 10.00 .394 | — |
| 1-84952-0 | 10 | 9.00 .354 | 11.18 .440 | 17.92 .705 | 11.00 .433 | 0.50 .019 |
| 1-84952-1 | 11 | 10.00 .394 | 12.18 .480 | 18.92 .745 | 12.00 .472 | — |
| 1-84952-2 | 12 | 11.00 .433 | 13.18 .519 | 19.92 .784 | 13.00 .512 | 0.50 .019 |
| 1-84952-3 | 13 | 12.00 .472 | 14.18 .558 | 20.92 .824 | 14.00 .551 | — |
| 1-84952-4 | 14 | 13.00 .512 | 15.18 .598 | 21.92 .863 | 15.00 .591 | 0.50 .019 |
| 1-84952-5 | 15 | 14.00 .551 | 16.18 .637 | 22.92 .902 | 16.00 .630 | — |
| 1-84952-6 | 16 | 15.00 .591 | 17.18 .676 | 23.92 .942 | 17.00 .669 | 0.50 .019 |
| 1-84952-7 | 17 | 16.00 .630 | 18.18 .716 | 24.92 .981 | 18.00 .709 | — |
| 1-84952-8 | 18 | 17.00 .669 | 19.18 .755 | 25.92 1.020 | 19.00 .748 | 0.50 .019 |
| 1-84952-9 | 19 | 18.00 .709 | 20.18 .794 | 26.92 1.060 | 20.00 .787 | — |
| 2-84952-0 | 20 | 19.00 .748 | 21.18 .834 | 27.92 1.099 | 21.00 .827 | 0.50 .019 |
| 2-84952-1 | 21 | 20.00 .787 | 22.18 .873 | 28.92 1.139 | 22.00 .866 | — |
| 2-84952-2 | 22 | 21.00 .827 | 23.18 .913 | 29.92 1.179 | 23.00 .906 | 0.50 .019 |
| 2-84952-3 | 23 | 22.00 .866 | 24.18 .952 | 30.92 1.217 | 24.00 .945 | — |
| 2-84952-4 | 24 | 23.00 .906 | 25.18 .991 | 31.92 1.257 | 25.00 .984 | 0.50 .019 |
| 2-84952-5 | 25 | 24.00 .945 | 26.18 1.031 | 32.92 1.296 | 26.00 1.024 | — |
| 2-84952-6 | 26 | 25.00 .984 | 27.18 1.070 | 33.92 1.335 | 27.00 1.063 | 0.50 .019 |
| 2-84952-7 | 27 | 26.00 1.024 | 28.18 1.109 | 34.92 1.375 | 28.00 1.102 | — |
| 2-84952-8 | 28 | 27.00 1.063 | 29.18 1.149 | 35.92 1.414 | 29.00 1.142 | 0.50 .019 |
| 2-84952-9 | 29 | 28.00 1.102 | 30.18 1.188 | 36.92 1.454 | 30.00 1.181 | — |
| 3-84952-0 | 30 | 29.00 1.142 | 31.18 1.228 | 37.92 1.492 | 31.00 1.221 | 0.50 .019 |

Product Dimensions (Continued)

**1.0 mm, FFC Connector,
SMT, Vertical, (Non-ZIF)**

Lead Free 84982

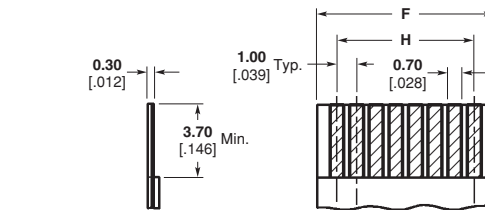
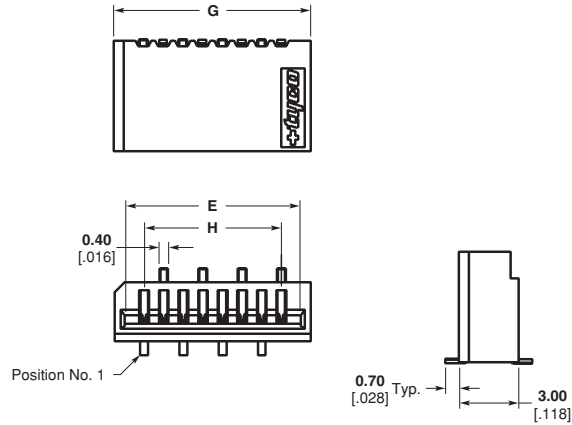
Material and Finish

Housing — Glass filled high temperature nylon, beige color

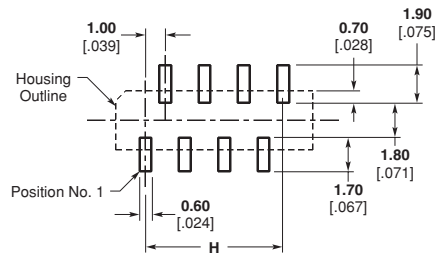
Contact — Phosphor bronze

Technical Documents

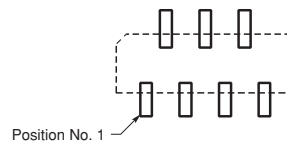
Product Specification — 108-51054



Recommended FFC/FPC Layout



**Recommended PCB Layout
For Even Position Connectors**



**Recommended PCB Layout
For Odd Position Connectors**



Electronics

1.0 mm, FFC Connector,
SMT, Vertical, (Non-ZIF)

Lead Free **84982**

Technical Documents
Product Specification — 108-51054

FPC Connector Family



Product Dimensions (Continued)

| Part Number | No. of Contacts | Dimension | | | |
|-------------|-----------------|----------------|----------------|----------------|----------------|
| | | E | F | G | H |
| 84982-4 | 4 | 5.00 .197 | 5.00 .197 | 6.00 .236 | 3.00 .118 |
| 84982-5 | 5 | 6.00 .236 | 6.00 .236 | 7.00 .276 | 4.00 .157 |
| 84982-6 | 6 | 7.00 .276 | 7.00 .276 | 8.00 .315 | 5.00 .197 |
| 84982-7 | 7 | 8.00 .315 | 8.00 .315 | 9.00 .354 | 6.00 .236 |
| 84982-8 | 8 | 9.00 .354 | 9.00 .354 | 10.00 .394 | 7.00 .276 |
| 84982-9 | 9 | 10.00 .394 | 10.00 .394 | 11.00 .433 | 8.00 .315 |
| 1-84982-0 | 10 | 11.00 .433 | 11.00 .433 | 12.00 .472 | 9.00 .354 |
| 1-84982-1 | 11 | 12.00 .472 | 12.00 .472 | 13.00 .512 | 10.00 .394 |
| 1-84982-2 | 12 | 13.00 .512 | 13.00 .512 | 14.00 .551 | 11.00 .433 |
| 1-84982-3 | 13 | 14.00 .551 | 14.00 .551 | 15.00 .591 | 12.00 .472 |
| 1-84982-4 | 14 | 15.00 .591 | 15.00 .591 | 16.00 .630 | 13.00 .512 |
| 1-84982-5 | 15 | 16.00 .630 | 16.00 .630 | 17.00 .669 | 14.00 .551 |
| 1-84982-6 | 16 | 17.00 .669 | 17.00 .669 | 18.00 .709 | 15.00 .591 |
| 1-84982-7 | 17 | 18.00 .709 | 18.00 .709 | 19.00 .748 | 16.00 .630 |
| 1-84982-8 | 18 | 19.00 .748 | 19.00 .748 | 20.00 .787 | 17.00 .669 |
| 1-84982-9 | 19 | 20.00 .787 | 20.00 .787 | 21.00 .827 | 18.00 .709 |
| 2-84982-0 | 20 | 21.00 .827 | 21.00 .827 | 22.00 .866 | 19.00 .748 |
| 2-84982-1 | 21 | 22.00 .866 | 22.00 .866 | 23.00 .906 | 20.00 .787 |
| 2-84982-2 | 22 | 23.00 .906 | 23.00 .906 | 24.00 .945 | 21.00 .827 |
| 2-84982-3 | 23 | 24.00 .945 | 24.00 .945 | 25.00 .984 | 22.00 .866 |
| 2-84982-4 | 24 | 25.00 .984 | 25.00 .984 | 26.00 1.024 | 23.00 .906 |
| 2-84982-5 | 25 | 26.00 1.024 | 26.00 1.024 | 27.00 1.063 | 24.00 .945 |
| 2-84982-6 | 26 | 27.00 1.063 | 27.00 1.063 | 28.00 1.102 | 25.00 .984 |
| 2-84982-7 | 27 | 28.00 1.102 | 28.00 1.102 | 29.00 1.142 | 26.00 1.024 |
| 2-84982-8 | 28 | 29.00 1.142 | 29.00 1.142 | 30.00 1.181 | 27.00 1.063 |
| 2-84982-9 | 29 | 30.00 1.181 | 30.00 1.181 | 31.00 1.221 | 28.00 1.102 |
| 3-84982-0 | 30 | 31.00 1.221 | 31.00 1.221 | 32.00 1.259 | 29.00 1.142 |
| 3-84982-1 | 31 | 32.00 1.259 | 32.00 1.259 | 33.00 1.299 | 30.00 1.181 |
| 3-84982-2 | 32 | 33.00 1.299 | 33.00 1.299 | 34.00 1.338 | 31.00 1.221 |
| 3-84982-3 | 33 | 34.00 1.338 | 34.00 1.338 | 35.00 1.377 | 32.00 1.259 |
| 3-84982-4 | 34 | 35.00 1.377 | 35.00 1.377 | 36.00 1.417 | 33.00 1.299 |
| 3-84982-5 | 35 | 36.00 1.417 | 36.00 1.417 | 37.00 1.456 | 34.00 1.338 |
| 3-84982-6 | 36 | 37.00 1.456 | 37.00 1.456 | 38.00 1.496 | 35.00 1.377 |
| 3-84982-7 | 37 | 38.00 1.496 | 38.00 1.496 | 39.00 1.535 | 36.00 1.417 |
| 3-84982-8 | 38 | 39.00 1.535 | 39.00 1.535 | 40.00 1.574 | 37.00 1.456 |
| 3-84982-9 | 39 | 40.00 1.574 | 40.00 1.574 | 41.00 1.614 | 38.00 1.496 |
| 4-84982-0 | 40 | 41.00 1.614 | 41.00 1.614 | 42.00 1.653 | 39.00 1.535 |

Product Dimensions (Continued)

**1.0 mm, FFC Connector,
SMT, Right Angle, Non-ZIF**

Lead Free 84981

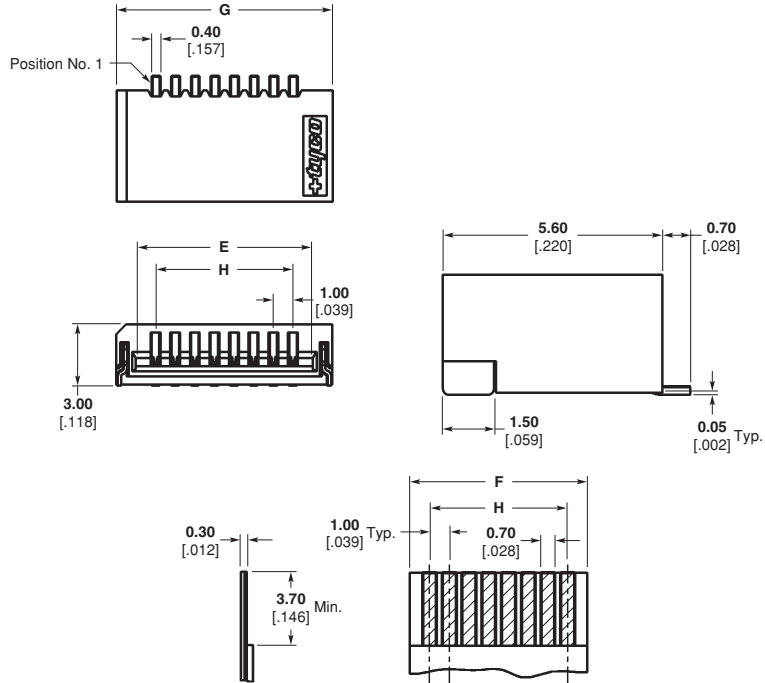
Material and Finish

Housing — Glass filled high temperature nylon, beige color

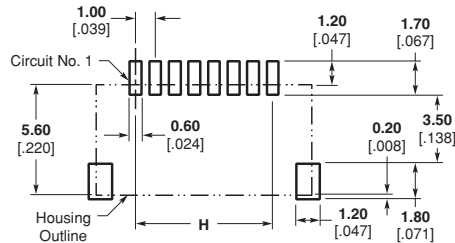
Contact — Phosphor bronze

Technical Documents

Product Specification — 108-51054



Recommended FFC/FPC Layout



Recommended PCB Layout



Electronics

1.0 mm, FFC Connector,
SMT, Right Angle, Non-ZIF

Lead Free 84981

Technical Documents
Product Specification — 108-51054

FPC Connector Family



Product Dimensions (Continued)

| Part Number | No. of Contacts | Dimension | | | |
|-------------|-----------------|----------------|----------------|----------------|----------------|
| | | E | F | G | H |
| 84981-4 | 4 | 5.00 .197 | 5.00 .197 | 7.00 .276 | 3.00 .118 |
| 84981-5 | 5 | 6.00 .236 | 6.00 .236 | 8.00 .315 | 4.00 .157 |
| 84981-6 | 6 | 7.00 .276 | 7.00 .276 | 9.00 .354 | 5.00 .197 |
| 84981-7 | 7 | 8.00 .315 | 8.00 .315 | 10.00 .394 | 6.00 .236 |
| 84981-8 | 8 | 9.00 .354 | 9.00 .354 | 11.00 .433 | 7.00 .276 |
| 84981-9 | 9 | 10.00 .394 | 10.00 .394 | 12.00 .472 | 8.00 .315 |
| 1-84981-0 | 10 | 11.00 .433 | 11.00 .433 | 13.00 .512 | 9.00 .354 |
| 1-84981-1 | 11 | 12.00 .472 | 12.00 .472 | 14.00 .551 | 10.00 .394 |
| 1-84981-2 | 12 | 13.00 .512 | 13.00 .512 | 15.00 .591 | 11.00 .433 |
| 1-84981-3 | 13 | 14.00 .551 | 14.00 .551 | 16.00 .630 | 12.00 .472 |
| 1-84981-4 | 14 | 15.00 .591 | 15.00 .591 | 17.00 .669 | 13.00 .512 |
| 1-84981-5 | 15 | 16.00 .630 | 16.00 .630 | 18.00 .709 | 14.00 .551 |
| 1-84981-6 | 16 | 17.00 .669 | 17.00 .669 | 19.00 .748 | 15.00 .591 |
| 1-84981-7 | 17 | 18.00 .709 | 18.00 .709 | 20.00 .787 | 16.00 .630 |
| 1-84981-8 | 18 | 19.00 .748 | 19.00 .748 | 21.00 .827 | 17.00 .669 |
| 1-84981-9 | 19 | 20.00 .787 | 20.00 .787 | 22.00 .866 | 18.00 .709 |
| 2-84981-0 | 20 | 21.00 .827 | 21.00 .827 | 23.00 .906 | 19.00 .748 |
| 2-84981-1 | 21 | 22.00 .866 | 22.00 .866 | 24.00 .945 | 20.00 .787 |
| 2-84981-2 | 22 | 23.00 .906 | 23.00 .906 | 25.00 .984 | 21.00 .827 |
| 2-84981-3 | 23 | 24.00 .945 | 24.00 .945 | 26.00 1.024 | 22.00 .866 |
| 2-84981-4 | 24 | 25.00 .984 | 25.00 .984 | 27.00 1.063 | 23.00 .906 |
| 2-84981-5 | 25 | 26.00 1.024 | 26.00 1.024 | 28.00 1.102 | 24.00 .945 |
| 2-84981-6 | 26 | 27.00 1.063 | 27.00 1.063 | 29.00 1.142 | 25.00 .984 |
| 2-84981-7 | 27 | 28.00 1.102 | 28.00 1.102 | 30.00 1.181 | 26.00 1.024 |
| 2-84981-8 | 28 | 29.00 1.142 | 29.00 1.142 | 31.00 1.221 | 27.00 1.063 |
| 2-84981-9 | 29 | 30.00 1.181 | 30.00 1.181 | 32.00 1.259 | 28.00 1.102 |
| 3-84981-0 | 30 | 31.00 1.221 | 31.00 1.221 | 33.00 1.299 | 29.00 1.142 |
| 3-84981-1 | 31 | 32.00 1.259 | 32.00 1.259 | 34.00 1.338 | 30.00 1.181 |
| 3-84981-2 | 32 | 33.00 1.299 | 33.00 1.299 | 35.00 1.377 | 31.00 1.221 |
| 3-84981-3 | 33 | 34.00 1.338 | 34.00 1.338 | 36.00 1.417 | 32.00 1.259 |
| 3-84981-4 | 34 | 35.00 1.377 | 35.00 1.377 | 37.00 1.456 | 33.00 1.299 |
| 3-84981-5 | 35 | 36.00 1.417 | 36.00 1.417 | 38.00 1.496 | 34.00 1.338 |
| 3-84981-6 | 36 | 37.00 1.456 | 37.00 1.456 | 39.00 1.535 | 35.00 1.377 |
| 3-84981-7 | 37 | 38.00 1.496 | 38.00 1.496 | 40.00 1.574 | 36.00 1.417 |
| 3-84981-8 | 38 | 39.00 1.535 | 39.00 1.535 | 41.00 1.614 | 37.00 1.456 |
| 3-84981-9 | 39 | 40.00 1.574 | 40.00 1.574 | 42.00 1.653 | 38.00 1.496 |
| 4-84981-0 | 40 | 41.00 1.614 | 41.00 1.614 | 43.00 1.692 | 39.00 1.535 |

Product Dimensions (Continued)

**1.0 mm, FPC Connector,
Non-ZIF, SMT, Right Angle,
Bottom Contact**

Part Number 1470852
Lead Free 1734798

Material and Finish

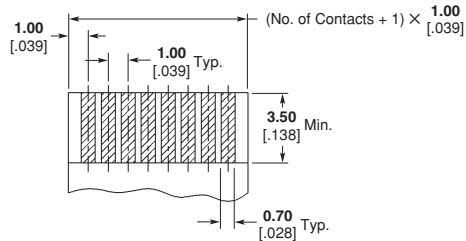
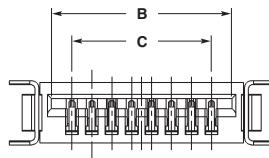
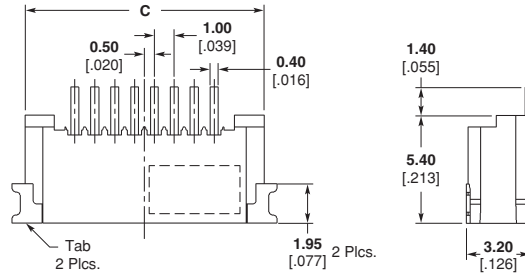
Housing — Thermoplastic, UL 94V-0,
black color

Tabs — Brass

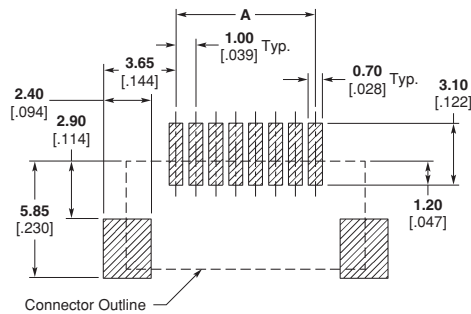
Contact — Phosphor bronze

Technical Documents

Product Specification — 108-57354



Recommended FPC Layout



Recommended PCB Layout

**1.0 mm, FPC Connector,
Non-ZIF, SMT, Right Angle,
Bottom Contact**

**Part Number 1470852
Lead Free 1734798**

Technical Documents
Product Specification — 108-57354

Product Dimensions (Continued)

| Part Number | Position | Dimension | | |
|-------------|----------|----------------|----------------|----------------|
| | | A | B | C |
| 1470852-4 | 4 | 3.00 .118 | 5.05 .198 | 7.00 .276 |
| 1470852-5 | 5 | 4.00 .157 | 6.05 .238 | 8.00 .315 |
| 1470852-6 | 6 | 5.00 .197 | 7.05 .277 | 9.00 .354 |
| 1470852-7 | 7 | 6.00 .236 | 8.05 .316 | 10.00 .394 |
| 1470852-8 | 8 | 7.00 .276 | 9.05 .356 | 11.00 .433 |
| 1470852-9 | 9 | 8.00 .315 | 10.05 .395 | 12.00 .472 |
| 1-1470852-0 | 10 | 9.00 .354 | 11.05 .435 | 13.00 .512 |
| 1-1470852-1 | 11 | 10.00 .394 | 12.05 .474 | 14.00 .551 |
| 1-1470852-2 | 12 | 11.00 .433 | 13.05 .513 | 15.00 .591 |
| 1-1470852-3 | 13 | 12.00 .472 | 14.05 .553 | 16.00 .630 |
| 1-1470852-4 | 14 | 13.00 .512 | 15.05 .592 | 17.00 .669 |
| 1-1470852-5 | 15 | 14.00 .551 | 16.05 .631 | 18.00 .709 |
| 1-1470852-6 | 16 | 15.00 .591 | 17.05 .671 | 19.00 .748 |
| 1-1470852-7 | 17 | 16.00 .630 | 18.05 .710 | 20.00 .787 |
| 1-1470852-8 | 18 | 17.00 .669 | 19.05 .750 | 21.00 .827 |
| 1-1470852-9 | 19 | 18.00 .709 | 20.05 .788 | 22.00 .866 |
| 2-1470852-0 | 20 | 19.00 .748 | 21.05 .828 | 23.00 .906 |
| 2-1470852-1 | 21 | 20.00 .787 | 22.05 .857 | 24.00 .945 |
| 2-1470852-2 | 22 | 21.00 .827 | 23.05 .907 | 25.00 .984 |
| 2-1470852-3 | 23 | 22.00 .866 | 24.05 .946 | 26.00 1.024 |
| 2-1470852-4 | 24 | 23.00 .906 | 25.05 .986 | 27.00 1.063 |
| 2-1470852-5 | 25 | 24.00 .945 | 26.05 1.025 | 28.00 1.102 |
| 2-1470852-6 | 26 | 25.00 .984 | 27.05 1.064 | 29.00 1.142 |
| 2-1470852-7 | 27 | 26.00 1.024 | 28.05 1.104 | 30.00 1.181 |
| 2-1470852-8 | 28 | 27.00 1.063 | 29.05 1.143 | 31.00 1.220 |
| 2-1470852-9 | 29 | 28.00 1.102 | 30.05 1.183 | 32.00 1.259 |
| 3-1470852-0 | 30 | 29.00 1.142 | 31.05 1.222 | 33.00 1.299 |

Product Dimensions (Continued)

1.0 mm, FFC Connector, Through-Hole, Vertical

Lead Free 84984

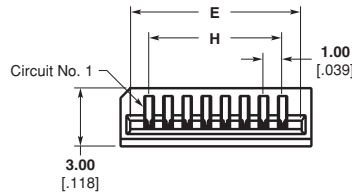
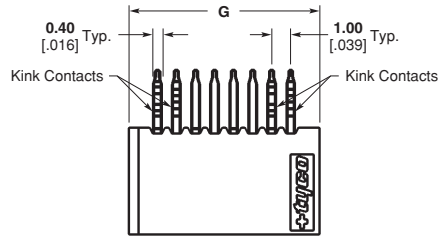
Material and Finish

Housing — Glass filled PBT, white color

Contact — Phosphor bronze

Technical Documents

Product Specification — 108-51058



Recommended FPC Layout



**Recommended PCB Layout
1.60 [0.063] Thickness
(For Even Position Connectors)**



**Recommended PCB Layout
1.60 [0.063] Thickness
(For Odd Position Connectors)**



Electronics

1.0 mm, FFC Connector,
Through-Hole, Vertical

Lead Free 84984

Technical Documents
Product Specification — 108-51058

FPC Connector Family



Product Dimensions (Continued)

| Part Number | No. of Contacts | Dimension | | | |
|-------------|-----------------|----------------|----------------|----------------|----------------|
| | | E | F | G | H |
| 84984-4 | 4 | 5.00 .197 | 5.00 .197 | 6.00 .236 | 3.00 .118 |
| 84984-5 | 5 | 6.00 .236 | 6.00 .236 | 7.00 .276 | 4.00 .157 |
| 84984-6 | 6 | 7.00 .276 | 7.00 .276 | 8.00 .315 | 5.00 .197 |
| 84984-7 | 7 | 8.00 .315 | 8.00 .315 | 9.00 .354 | 6.00 .236 |
| 84984-8 | 8 | 9.00 .354 | 9.00 .354 | 10.00 .394 | 7.00 .276 |
| 84984-9 | 9 | 10.00 .394 | 10.00 .394 | 11.00 .433 | 8.00 .315 |
| 1-84984-0 | 10 | 11.00 .433 | 11.00 .433 | 12.00 .472 | 9.00 .354 |
| 1-84984-1 | 11 | 12.00 .472 | 12.00 .472 | 13.00 .512 | 10.00 .394 |
| 1-84984-2 | 12 | 13.00 .512 | 13.00 .512 | 14.00 .551 | 11.00 .433 |
| 1-84984-3 | 13 | 14.00 .551 | 14.00 .551 | 15.00 .591 | 12.00 .472 |
| 1-84984-4 | 14 | 15.00 .591 | 15.00 .591 | 16.00 .630 | 13.00 .512 |
| 1-84984-5 | 15 | 16.00 .630 | 16.00 .630 | 17.00 .669 | 14.00 .551 |
| 1-84984-6 | 16 | 17.00 .669 | 17.00 .669 | 18.00 .709 | 15.00 .591 |
| 1-84984-7 | 17 | 18.00 .709 | 18.00 .709 | 19.00 .748 | 16.00 .630 |
| 1-84984-8 | 18 | 19.00 .748 | 19.00 .748 | 20.00 .787 | 17.00 .669 |
| 1-84984-9 | 19 | 20.00 .787 | 20.00 .787 | 21.00 .827 | 18.00 .709 |
| 2-84984-0 | 20 | 21.00 .827 | 21.00 .827 | 22.00 .866 | 19.00 .748 |
| 2-84984-1 | 21 | 22.00 .866 | 22.00 .866 | 23.00 .906 | 20.00 .787 |
| 2-84984-2 | 22 | 23.00 .906 | 23.00 .906 | 24.00 .945 | 21.00 .827 |
| 2-84984-3 | 23 | 24.00 .945 | 24.00 .945 | 25.00 .984 | 22.00 .866 |
| 2-84984-4 | 24 | 25.00 .984 | 25.00 .984 | 26.00 1.024 | 23.00 .906 |
| 2-84984-5 | 25 | 26.00 1.024 | 26.00 1.024 | 27.00 1.063 | 24.00 .945 |
| 2-84984-6 | 26 | 27.00 1.063 | 27.00 1.063 | 28.00 1.102 | 25.00 .984 |
| 2-84984-7 | 27 | 28.00 1.102 | 28.00 1.102 | 29.00 1.142 | 26.00 1.024 |
| 2-84984-8 | 28 | 29.00 1.142 | 29.00 1.142 | 30.00 1.181 | 27.00 1.063 |
| 2-84984-9 | 29 | 30.00 1.181 | 30.00 1.181 | 31.00 1.221 | 28.00 1.102 |
| 3-84984-0 | 30 | 31.00 1.221 | 31.00 1.221 | 32.00 1.259 | 29.00 1.142 |
| 3-84984-1 | 31 | 32.00 1.259 | 32.00 1.259 | 33.00 1.299 | 30.00 1.181 |
| 3-84984-2 | 32 | 33.00 1.299 | 33.00 1.299 | 34.00 1.338 | 31.00 1.221 |
| 3-84984-3 | 33 | 34.00 1.338 | 34.00 1.338 | 35.00 1.377 | 32.00 1.259 |
| 3-84984-4 | 34 | 35.00 1.377 | 35.00 1.377 | 36.00 1.417 | 33.00 1.299 |
| 3-84984-5 | 35 | 36.00 1.417 | 36.00 1.417 | 37.00 1.456 | 34.00 1.338 |
| 3-84984-6 | 36 | 37.00 1.456 | 37.00 1.456 | 38.00 1.496 | 35.00 1.377 |
| 3-84984-7 | 37 | 38.00 1.496 | 38.00 1.496 | 39.00 1.535 | 36.00 1.417 |
| 3-84984-8 | 38 | 39.00 1.535 | 39.00 1.535 | 40.00 1.574 | 37.00 1.456 |
| 3-84984-9 | 39 | 40.00 1.574 | 40.00 1.574 | 41.00 1.614 | 38.00 1.496 |
| 4-84984-0 | 40 | 41.00 1.614 | 41.00 1.614 | 42.00 1.653 | 39.00 1.535 |

Product Dimensions (Continued)

1.0 mm, FFC Connector, Through-Hole, Right Angle

Lead Free 84983

Material and Finish

Housing — Glass filled PBT, white color

Contact — Phosphor bronze

Technical Documents

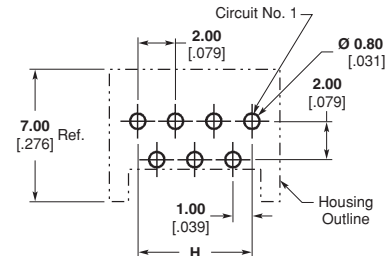
Product Specification — 108-51058



Recommended FPC Layout



**Recommended PCB Layout
1.60 [.063] Thickness
(For Even Position Connectors)**



**Recommended PCB Layout
1.60 [.063] Thickness
(For Odd Position Connectors)**



Electronics

1.0 mm, FFC Connector,
Through-Hole, Right Angle,
Top Contact

Lead Free 84983

Technical Documents
Product Specification — 108-51058

FPC Connector Family



Product Dimensions (Continued)

| Part Number | No. of Contacts | Dimension | | | |
|-------------|-----------------|----------------|----------------|----------------|----------------|
| | | E | F | G | H |
| 84983-4 | 4 | 5.00 .197 | 5.00 .197 | 6.00 .236 | 3.00 .118 |
| 84983-5 | 5 | 6.00 .236 | 6.00 .236 | 7.00 .276 | 4.00 .157 |
| 84983-6 | 6 | 7.00 .276 | 7.00 .276 | 8.00 .315 | 5.00 .197 |
| 84983-7 | 7 | 8.00 .315 | 8.00 .315 | 9.00 .354 | 6.00 .236 |
| 84983-8 | 8 | 9.00 .354 | 9.00 .354 | 10.00 .394 | 7.00 .276 |
| 84983-9 | 9 | 10.00 .394 | 10.00 .394 | 11.00 .433 | 8.00 .315 |
| 1-84983-0 | 10 | 11.00 .433 | 11.00 .433 | 12.00 .472 | 9.00 .354 |
| 1-84983-1 | 11 | 12.00 .472 | 12.00 .472 | 13.00 .512 | 10.00 .394 |
| 1-84983-2 | 12 | 13.00 .512 | 13.00 .512 | 14.00 .551 | 11.00 .433 |
| 1-84983-3 | 13 | 14.00 .551 | 14.00 .551 | 15.00 .591 | 12.00 .472 |
| 1-84983-4 | 14 | 15.00 .591 | 15.00 .591 | 16.00 .630 | 13.00 .512 |
| 1-84983-5 | 15 | 16.00 .630 | 16.00 .630 | 17.00 .669 | 14.00 .551 |
| 1-84983-6 | 16 | 17.00 .669 | 17.00 .669 | 18.00 .709 | 15.00 .591 |
| 1-84983-7 | 17 | 18.00 .709 | 18.00 .709 | 19.00 .748 | 16.00 .630 |
| 1-84983-8 | 18 | 19.00 .748 | 19.00 .748 | 20.00 .787 | 17.00 .669 |
| 1-84983-9 | 19 | 20.00 .787 | 20.00 .787 | 21.00 .827 | 18.00 .709 |
| 2-84983-0 | 20 | 21.00 .827 | 21.00 .827 | 22.00 .866 | 19.00 .748 |
| 2-84983-1 | 21 | 22.00 .866 | 22.00 .866 | 23.00 .906 | 20.00 .787 |
| 2-84983-2 | 22 | 23.00 .906 | 23.00 .906 | 24.00 .945 | 21.00 .827 |
| 2-84983-3 | 23 | 24.00 .945 | 24.00 .945 | 25.00 .984 | 22.00 .866 |
| 2-84983-4 | 24 | 25.00 .984 | 25.00 .984 | 26.00 1.024 | 23.00 .906 |
| 2-84983-5 | 25 | 26.00 1.024 | 26.00 1.024 | 27.00 1.063 | 24.00 .945 |
| 2-84983-6 | 26 | 27.00 1.063 | 27.00 1.063 | 28.00 1.102 | 25.00 .984 |
| 2-84983-7 | 27 | 28.00 1.102 | 28.00 1.102 | 29.00 1.142 | 26.00 1.024 |
| 2-84983-8 | 28 | 29.00 1.142 | 29.00 1.142 | 30.00 1.181 | 27.00 1.063 |
| 2-84983-9 | 29 | 30.00 1.181 | 30.00 1.181 | 31.00 1.221 | 28.00 1.102 |
| 3-84983-0 | 30 | 31.00 1.221 | 31.00 1.221 | 32.00 1.259 | 29.00 1.142 |
| 3-84983-1 | 31 | 32.00 1.259 | 32.00 1.259 | 33.00 1.299 | 30.00 1.181 |
| 3-84983-2 | 32 | 33.00 1.299 | 33.00 1.299 | 34.00 1.338 | 31.00 1.221 |
| 3-84983-3 | 33 | 34.00 1.338 | 34.00 1.338 | 35.00 1.377 | 32.00 1.259 |
| 3-84983-4 | 34 | 35.00 1.377 | 35.00 1.377 | 36.00 1.417 | 33.00 1.299 |
| 3-84983-5 | 35 | 36.00 1.417 | 36.00 1.417 | 37.00 1.456 | 34.00 1.338 |
| 3-84983-6 | 36 | 37.00 1.456 | 37.00 1.456 | 38.00 1.496 | 35.00 1.377 |
| 3-84983-7 | 37 | 38.00 1.496 | 38.00 1.496 | 39.00 1.535 | 36.00 1.417 |
| 3-84983-8 | 38 | 39.00 1.535 | 39.00 1.535 | 40.00 1.574 | 37.00 1.456 |
| 3-84983-9 | 39 | 40.00 1.574 | 40.00 1.574 | 41.00 1.614 | 38.00 1.496 |
| 4-84983-0 | 40 | 41.00 1.614 | 41.00 1.614 | 42.00 1.653 | 39.00 1.535 |

Product Dimensions (Continued)

**1.0 mm, FPC Connector,
Non-ZIF, Right-Angle,
Bottom Contact, Type B**

Part Number 1470790
Lead Free 1734779

Material and Finish

Housing — Thermoplastic, UL 94V-0,
black color

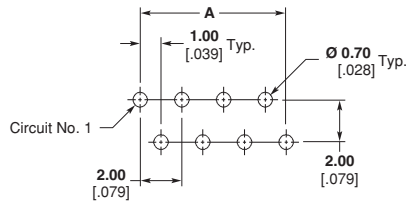
Contacts — Phosphor bronze

Technical Documents

Product Specification — 108-57354



Recommended FPC Layout



Recommended PCB Layout

**1.0 mm, FPC Connector,
Non-ZIF, Right Angle,
Bottom Contact, Type B**

**Part Number 1470790
Lead Free 1734779**

Technical Documents
Product Specification — 108-57354

Product Dimensions (Continued)

| Part Number | No. of Contacts | Dimension | | |
|-------------|-----------------|-----------------------|-----------------------|-----------------------|
| | | A | B | C |
| 1470790-4 | 4 | 3.00 .118 | 5.05 .198 | 7.00 .276 |
| 1470790-5 | 5 | 4.00 .157 | 6.05 .238 | 8.00 .315 |
| 1470790-6 | 6 | 5.00 .197 | 7.05 .277 | 9.00 .354 |
| 1470790-7 | 7 | 6.00 .236 | 8.05 .316 | 10.00 .394 |
| 1470790-8 | 8 | 7.00 .276 | 9.05 .356 | 11.00 .433 |
| 1470790-9 | 9 | 8.00 .315 | 10.05 .395 | 12.00 .472 |
| 1-1470790-0 | 10 | 9.00 .354 | 11.05 .435 | 13.00 .512 |
| 1-1470790-1 | 11 | 10.00 .394 | 12.05 .474 | 14.00 .551 |
| 1-1470790-2 | 12 | 11.00 .433 | 13.05 .513 | 15.00 .591 |
| 1-1470790-3 | 13 | 12.00 .472 | 14.05 .553 | 16.00 .630 |
| 1-1470790-4 | 14 | 13.00 .512 | 15.05 .592 | 17.00 .669 |
| 1-1470790-5 | 15 | 14.00 .551 | 16.05 .631 | 18.00 .709 |
| 1-1470790-6 | 16 | 15.00 .591 | 17.05 .671 | 19.00 .748 |
| 1-1470790-7 | 17 | 16.00 .630 | 18.05 .710 | 20.00 .787 |
| 1-1470790-8 | 18 | 17.00 .669 | 19.05 .750 | 21.00 .827 |
| 1-1470790-9 | 19 | 18.00 .709 | 20.05 .788 | 22.00 .866 |
| 2-1470790-0 | 20 | 19.00 .748 | 21.05 .828 | 23.00 .906 |
| 2-1470790-1 | 21 | 20.00 .787 | 22.05 .857 | 24.00 .945 |
| 2-1470790-2 | 22 | 21.00 .827 | 23.05 .907 | 25.00 .984 |
| 2-1470790-3 | 23 | 22.00 .866 | 24.05 .946 | 26.00 1.024 |
| 2-1470790-4 | 24 | 23.00 .906 | 25.05 .986 | 27.00 1.063 |
| 2-1470790-5 | 25 | 24.00 .945 | 26.05 1.025 | 28.00 1.102 |
| 2-1470790-6 | 26 | 25.00 .984 | 27.05 1.064 | 29.00 1.142 |
| 2-1470790-7 | 27 | 26.00 1.024 | 28.05 1.104 | 30.00 1.181 |
| 2-1470790-8 | 28 | 27.00 1.063 | 29.05 1.143 | 31.00 1.220 |
| 2-1470790-9 | 29 | 28.00 1.102 | 30.05 1.183 | 32.00 1.259 |
| 3-1470790-0 | 30 | 29.00 1.142 | 31.05 1.222 | 33.00 1.299 |

Product Dimensions (Continued)

1.25 mm, FFC Connector, Vertical

Lead Free 84534

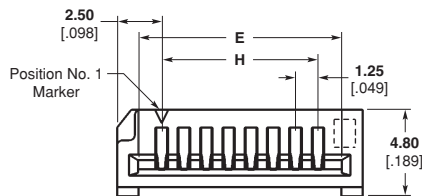
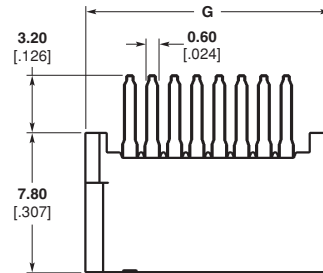
Material and Finish

Housing — Glass filled PBT, white color

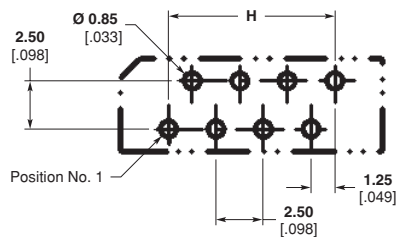
Contact — Phosphor bronze

Technical Documents

Product Specification — 108-51021



Recommended FFC Layout



Recommended PCB Layout

1.25 mm, FFC Connector,
Vertical

Lead Free **84534**

Technical Documents
Product Specification — 108-51021

Product Dimensions (Continued)

| Part Number | No. of Contacts | Dimension | | | |
|-------------|-----------------|----------------|----------------|----------------|----------------|
| | | E | F | G | H |
| 84534-4 | 4 | 6.40 .251 | 6.25 .246 | 8.75 .344 | 3.75 .147 |
| 84534-5 | 5 | 7.65 .301 | 7.50 .295 | 10.00 .393 | 5.00 .196 |
| 84534-6 | 6 | 8.90 .350 | 8.75 .344 | 11.25 .442 | 6.25 .246 |
| 84534-7 | 7 | 10.15 .399 | 10.00 .393 | 12.50 .492 | 7.50 .295 |
| 84534-8 | 8 | 11.40 .448 | 11.25 .442 | 13.75 .541 | 8.75 .344 |
| 84534-9 | 9 | 12.65 .498 | 12.50 .492 | 15.00 .590 | 10.00 .393 |
| 1-84534-0 | 10 | 13.90 .547 | 13.75 .541 | 16.25 .639 | 11.25 .442 |
| 1-84534-1 | 11 | 15.15 .596 | 15.00 .590 | 17.50 .688 | 12.50 .492 |
| 1-84534-2 | 12 | 16.40 .645 | 16.25 .639 | 18.75 .738 | 13.75 .541 |
| 1-84534-3 | 13 | 17.65 .694 | 17.50 .688 | 20.00 .787 | 15.00 .590 |
| 1-84534-4 | 14 | 18.90 .744 | 18.75 .738 | 21.25 .836 | 16.25 .639 |
| 1-84534-5 | 15 | 20.15 .793 | 20.00 .787 | 22.50 .885 | 17.50 .688 |
| 1-84534-6 | 16 | 21.40 .842 | 21.25 .836 | 23.75 .935 | 18.75 .738 |
| 1-84534-7 | 17 | 22.65 .891 | 22.50 .885 | 25.00 .984 | 20.00 .787 |
| 1-84534-8 | 18 | 23.90 .940 | 23.75 .935 | 26.25 1.033 | 21.25 .836 |
| 1-84534-9 | 19 | 25.15 .990 | 25.00 .984 | 27.50 1.082 | 22.50 .885 |
| 2-84534-0 | 20 | 26.40 1.039 | 26.25 1.033 | 28.75 1.131 | 23.75 .935 |
| 2-84534-1 | 21 | 27.65 1.088 | 27.50 1.082 | 30.00 1.181 | 25.00 .984 |
| 2-84534-2 | 22 | 28.90 1.137 | 28.75 1.131 | 31.25 1.230 | 26.25 1.033 |
| 2-84534-3 | 23 | 30.15 1.187 | 30.00 1.181 | 32.50 1.279 | 27.50 1.082 |
| 2-84534-4 | 24 | 31.40 1.236 | 31.25 1.230 | 33.75 1.328 | 28.75 1.131 |
| 2-84534-5 | 25 | 32.65 1.285 | 32.50 1.279 | 35.00 1.377 | 30.00 1.181 |
| 2-84534-6 | 26 | 33.90 1.334 | 33.75 1.328 | 36.25 1.427 | 31.25 1.230 |
| 2-84534-7 | 27 | 35.15 1.383 | 35.00 1.377 | 37.50 1.476 | 32.50 1.279 |
| 2-84534-8 | 28 | 36.40 1.433 | 36.25 1.427 | 38.75 1.525 | 33.75 1.328 |
| 2-84534-9 | 29 | 37.65 1.482 | 37.50 1.476 | 40.00 1.574 | 35.00 1.377 |
| 3-84534-0 | 30 | 38.90 1.531 | 38.75 1.525 | 41.25 1.624 | 36.25 1.427 |
| 3-84534-1 | 31 | 40.15 1.580 | 40.00 1.574 | 42.50 1.673 | 37.50 1.476 |
| 3-84534-2 | 32 | 41.40 1.629 | 41.25 1.624 | 43.75 1.722 | 38.75 1.525 |
| 3-84534-3 | 33 | 42.65 1.679 | 42.50 1.673 | 45.00 1.771 | 40.00 1.574 |
| 3-84534-4 | 34 | 43.90 1.728 | 43.75 1.722 | 46.25 1.820 | 41.25 1.624 |
| 3-84534-5 | 35 | 45.15 1.777 | 45.00 1.771 | 47.50 1.870 | 42.50 1.673 |
| 3-84534-6 | 36 | 46.40 1.826 | 46.25 1.820 | 48.75 1.919 | 43.75 1.722 |
| 3-84534-7 | 37 | 47.65 1.875 | 47.50 1.870 | 50.00 1.968 | 45.00 1.771 |
| 3-84534-8 | 38 | 48.90 1.925 | 48.75 1.919 | 51.25 2.017 | 46.25 1.820 |
| 3-84534-9 | 39 | 50.15 1.974 | 50.00 1.968 | 52.50 2.066 | 47.50 1.870 |
| 4-84534-0 | 40 | 51.40 2.023 | 51.25 2.017 | 53.75 2.116 | 48.75 1.919 |

Product Dimensions (Continued)

**1.25 mm, FFC Connector,
Right Angle, Top Contact
Non-ZIF**

Lead Free 84533

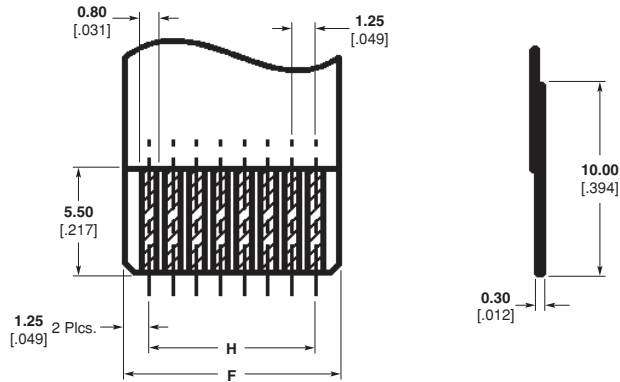
Material and Finish

Housing — Glass filled PBT, white color

Contact — Post plated tin phosphor bronze

Technical Documents

Product Specification — 108-51021



Recommended FFC Layout



Recommended PCB Layout



Electronics

1.25 mm, FFC Connector,
Right Angle, Top Contact
Non-ZIF

Lead Free **84533**

Technical Documents
Product Specification — 108-51021

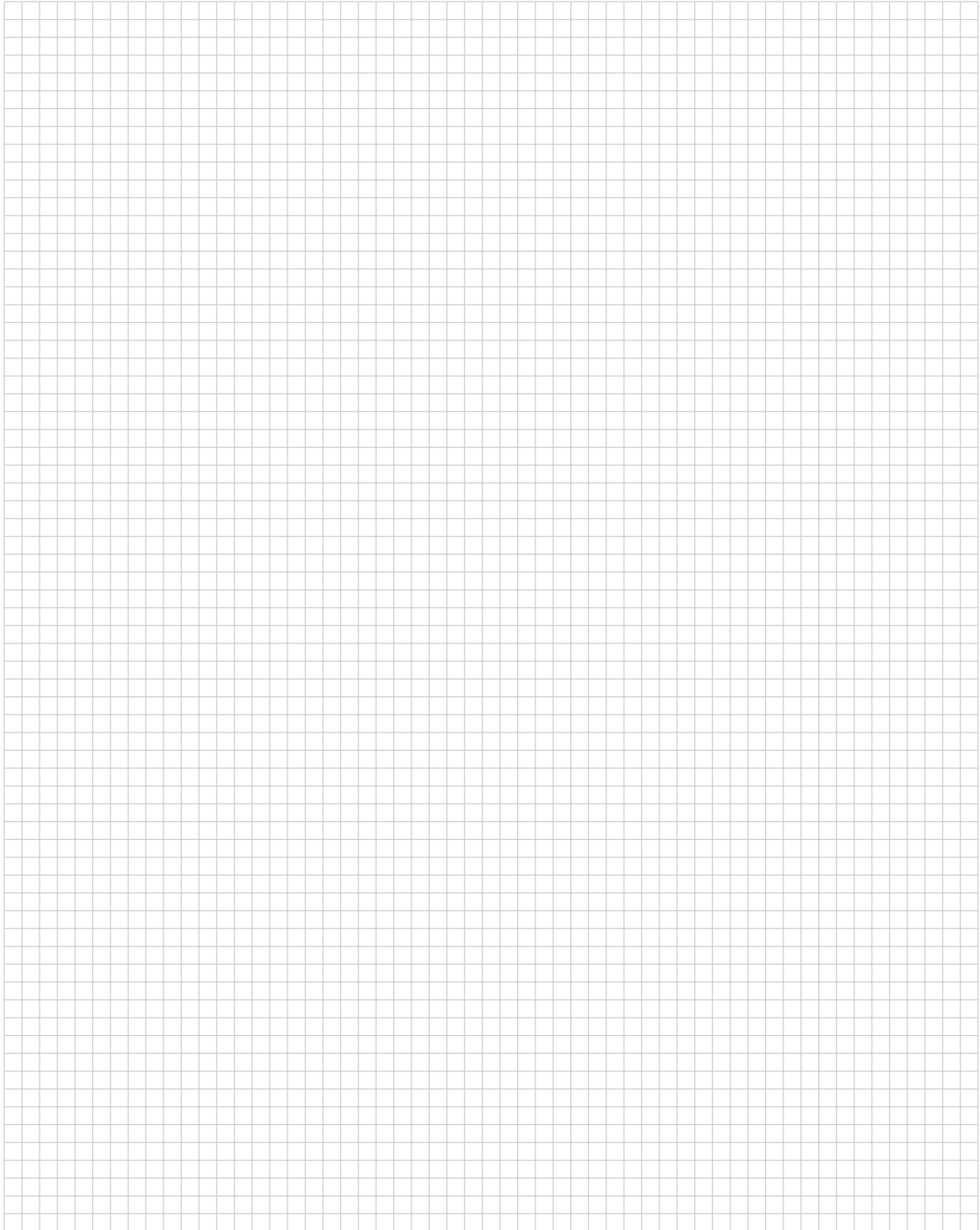
FPC Connector Family



Product Dimensions (Continued)

| Part Number | No. of Contacts | Dimension | | | |
|-------------|-----------------|----------------|----------------|----------------|----------------|
| | | E | F | G | H |
| 84533-4 | 4 | 6.40 .251 | 6.25 .246 | 8.75 .344 | 3.75 .147 |
| 84533-5 | 5 | 7.65 .301 | 7.50 .295 | 10.00 .393 | 5.00 .196 |
| 84533-6 | 6 | 8.90 .350 | 8.75 .344 | 11.25 .442 | 6.25 .246 |
| 84533-7 | 7 | 10.15 .399 | 10.00 .393 | 12.50 .492 | 7.50 .295 |
| 84533-8 | 8 | 11.40 .448 | 11.25 .442 | 13.75 .541 | 8.75 .344 |
| 84533-9 | 9 | 12.65 .498 | 12.50 .492 | 15.00 .590 | 10.00 .393 |
| 1-84533-0 | 10 | 13.90 .547 | 13.75 .541 | 16.25 .639 | 11.25 .442 |
| 1-84533-1 | 11 | 15.15 .596 | 15.00 .590 | 17.50 .688 | 12.50 .492 |
| 1-84533-2 | 12 | 16.40 .645 | 16.25 .639 | 18.75 .738 | 13.75 .541 |
| 1-84533-3 | 13 | 17.65 .694 | 17.50 .688 | 20.00 .787 | 15.00 .590 |
| 1-84533-4 | 14 | 18.90 .744 | 18.75 .738 | 21.25 .836 | 16.25 .639 |
| 1-84533-5 | 15 | 20.15 .793 | 20.00 .787 | 22.50 .885 | 17.50 .688 |
| 1-84533-6 | 16 | 21.40 .842 | 21.25 .836 | 23.75 .935 | 18.75 .738 |
| 1-84533-7 | 17 | 22.65 .891 | 22.50 .885 | 25.00 .984 | 20.00 .787 |
| 1-84533-8 | 18 | 23.90 .940 | 23.75 .935 | 26.25 1.033 | 21.25 .836 |
| 1-84533-9 | 19 | 25.15 .990 | 25.00 .984 | 27.50 1.082 | 22.50 .885 |
| 2-84533-0 | 20 | 26.40 1.039 | 26.25 1.033 | 28.75 1.131 | 23.75 .935 |
| 2-84533-1 | 21 | 27.65 1.088 | 27.50 1.082 | 30.00 1.181 | 25.00 .984 |
| 2-84533-2 | 22 | 28.90 1.137 | 28.75 1.131 | 31.25 1.230 | 26.25 1.033 |
| 2-84533-3 | 23 | 30.15 1.187 | 30.00 1.181 | 32.50 1.279 | 27.50 1.082 |
| 2-84533-4 | 24 | 31.40 1.236 | 31.25 1.230 | 33.75 1.328 | 28.75 1.131 |
| 2-84533-5 | 25 | 32.65 1.285 | 32.50 1.279 | 35.00 1.377 | 30.00 1.181 |
| 2-84533-6 | 26 | 33.90 1.334 | 33.75 1.328 | 36.25 1.427 | 31.25 1.230 |
| 2-84533-7 | 27 | 35.15 1.383 | 35.00 1.377 | 37.50 1.476 | 32.50 1.279 |
| 2-84533-8 | 28 | 36.40 1.433 | 36.25 1.427 | 38.75 1.525 | 33.75 1.328 |
| 2-84533-9 | 29 | 37.65 1.482 | 37.50 1.476 | 40.00 1.574 | 35.00 1.377 |
| 3-84533-0 | 30 | 38.90 1.531 | 38.75 1.525 | 41.25 1.624 | 36.25 1.427 |
| 3-84533-1 | 31 | 40.15 1.580 | 40.00 1.574 | 42.50 1.673 | 37.50 1.476 |
| 3-84533-2 | 32 | 41.40 1.629 | 41.25 1.624 | 43.75 1.722 | 38.75 1.525 |
| 3-84533-3 | 33 | 42.65 1.679 | 42.50 1.673 | 45.00 1.771 | 40.00 1.574 |
| 3-84533-4 | 34 | 43.90 1.728 | 43.75 1.722 | 46.25 1.820 | 41.25 1.624 |
| 3-84533-5 | 35 | 45.15 1.777 | 45.00 1.771 | 47.50 1.870 | 42.50 1.673 |
| 3-84533-6 | 36 | 46.40 1.826 | 46.25 1.820 | 48.75 1.919 | 43.75 1.722 |
| 3-84533-7 | 37 | 47.65 1.875 | 47.50 1.870 | 50.00 1.968 | 45.00 1.771 |
| 3-84533-8 | 38 | 48.90 1.925 | 48.75 1.919 | 51.25 2.017 | 46.25 1.820 |
| 3-84533-9 | 39 | 50.15 1.974 | 50.00 1.968 | 52.50 2.066 | 47.50 1.870 |
| 4-84533-0 | 40 | 51.40 2.023 | 51.25 2.017 | 53.75 2.116 | 48.75 1.919 |

Engineering Notes



Engineering Notes

A large grid area for writing engineering notes, consisting of a 30x40 grid of small squares.

Electronics

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 Fax: +60-3-78053066

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 Fax: +64-9-634-4586

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 Phone: +852-2735-1628
 Fax: +852-2735-0243

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 Phone: +86-21-53838188/64850602
 Fax: +86-21-53838018/54260180

Shunde
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 Fax: +86-765-775-2823

Europe/Middle East/Africa

Austria – Vienna
 Phone: +43-190-560-0
 Fax: +43-190-560-1333

Belgium – Kessel-Lo
 Phone: +32-16-35-23-00
 Fax: +32-16-35-23-52

Bulgaria – Sofia
 Phone: +359-2-971-2152
 Fax: +359-2-971-2153

Czech Republic – Kurim
 Phone: +420-5-41-162-111
 Fax: +420-5-41-162-223

Denmark – Viby J
 Phone: +45-70-15-52-00
 Fax: +45-43-44-14-14

Egypt – Cairo
 Phone: +20-2-417-76-47
 Fax: +20-2-419-23-34

Estonia – Tallinn
 Phone: +372-65-05-474
 Fax: +372-65-05-470

Finland – Helsinki
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 Fax: +358-95-12-34-250

France – Cergy-Pontoise
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 Fax: +33-1-3420-8600

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Germany – Langen
 Phone: +49-6103-709-0
 Fax: +49-6103-709-1223

Germany – Speyer
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 Fax: +49-6232-30-2243

Germany
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 Fax: +49-2247-305-122

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 Phone: +44-141 810 8968
 Fax: +44-141 810 8971

Great Britain – Dorcan, Swindon
Raychem Products
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 Fax: +44-1793-572516

Greece – Athens
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 Fax: +30-1-9370-655

Hungary – Budapest
 Phone: +36-1-289-1000
 Fax: +36-1-289-1010

Ireland – Dublin
 Phone: +353-1-820-3000
 Fax: +353-1-820-9790

Israel – Yokneam
 Phone: +972-4-959-0508
 Fax: +972-4-959-0506

Italy – Collegno (Torino)
 Phone: +39-011-4012-111
 Fax: +39-011-4031-116

Lithuania – Vilnius
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 Fax: +370-5-2131-403

Netherlands – 's-Hertogenbosch
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Poland – Warsaw
 Phone: +48-22-45-76-700
 Fax: +48-22-45-76-720

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 Phone: +40-1-311-3479/3596
 Fax: +40-1-312-0574

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 Phone: +7-095-926-5506/07/08/09
 Fax: +7-095-926-5505

Russia – St. Petersburg
 Phone: +7-812-118-8192
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Slovakia – Banská Bystrica
 Phone: +421-48-415-20-11/12
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Slovenia – Ljubljana
 Phone: +386-1561-3270
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 Phone: +27-41-405-4500
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Turkey – Istanbul
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 Fax: +90-212-281-8184

Ukraine – Kiev
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 Fax: +38-044-568-5740

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