

FOR BOARD-TO-CABLE CONNECTION

240R SERIES

■ FEATURES

- 1.27 mm (0.050 in.) pitch contact arrangement enables high-density mounting.
- Bellows contacts ensure stable contact preventing pins from bending. The bellows contacts also have excellent stability with repeated insertion and extraction.
- Cables and connectors are assembled by discrete wire IDC.
- Connectors on the cable side provide superb EMI shielding/ESD protection with an inner-metal and outer-plastic dual cover.
- Conforms to IEEE 1284.C Interface
- Tails are spaced in a four-row staggered arrangement (2.54 mm × 1.905 mm) (0.100 in. × 0.075 in.) for easy PC board design.



■ SPECIFICATIONS

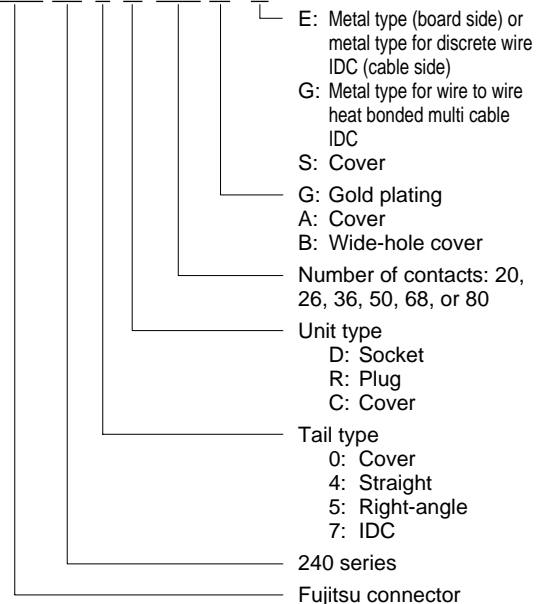
| Item | Specifications |
|------------------------------|--|
| Operating temperature range | -55°C to +85°C |
| Current rating | DC 1 A |
| Voltage rating | AC 240 V |
| Contact resistance | 50 mΩ max. (DC 20 mV, 10 mA) |
| Insulation resistance | 1,000 MΩ min. (DC 500 V) |
| Dielectric withstand voltage | AC 750 V for 1 minute |
| Applicable wire | AWG #28 and #30 stranded wires with φ0.5 to 0.65 mm (0.020 to 0.026 in.) insulation diameter |

■ MATERIALS

| Item | Materials | |
|-----------|---------------------|-------------------|
| Insulator | Polyester (UL94V-0) | |
| Conductor | Copper alloy | |
| Plating | Contact | Gold plating |
| | Terminal | Palladium plating |

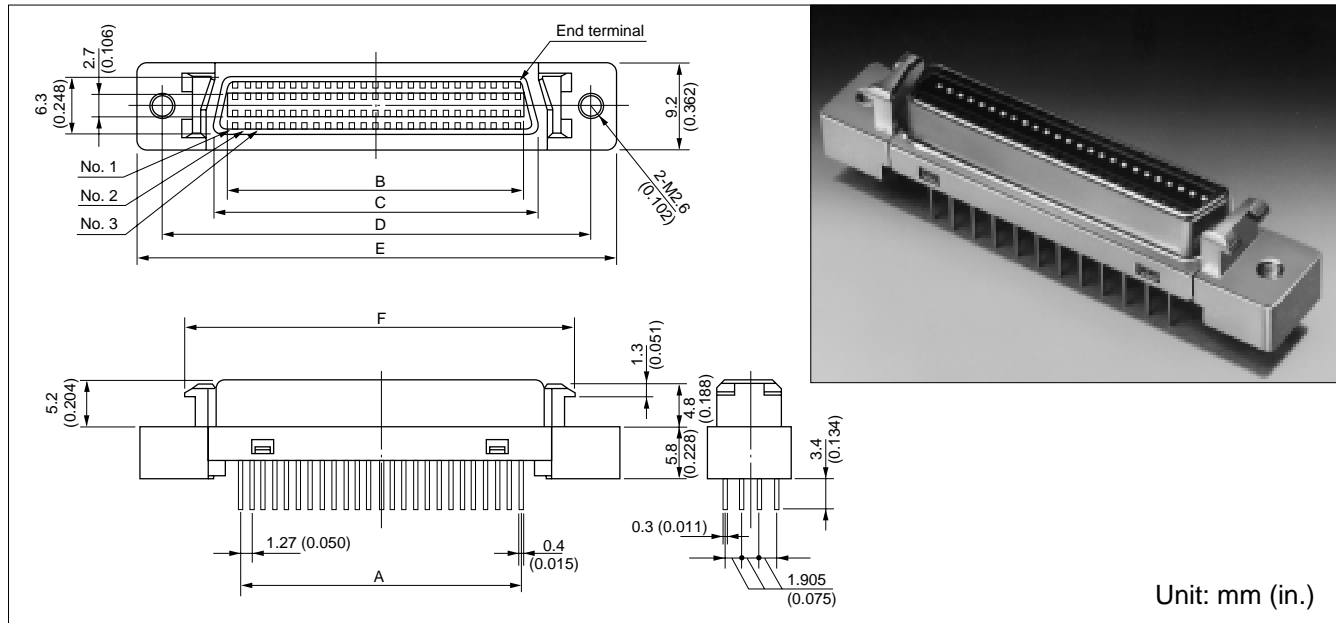
■ ORDERING CODE

FCN-24 5 D 050-G / E

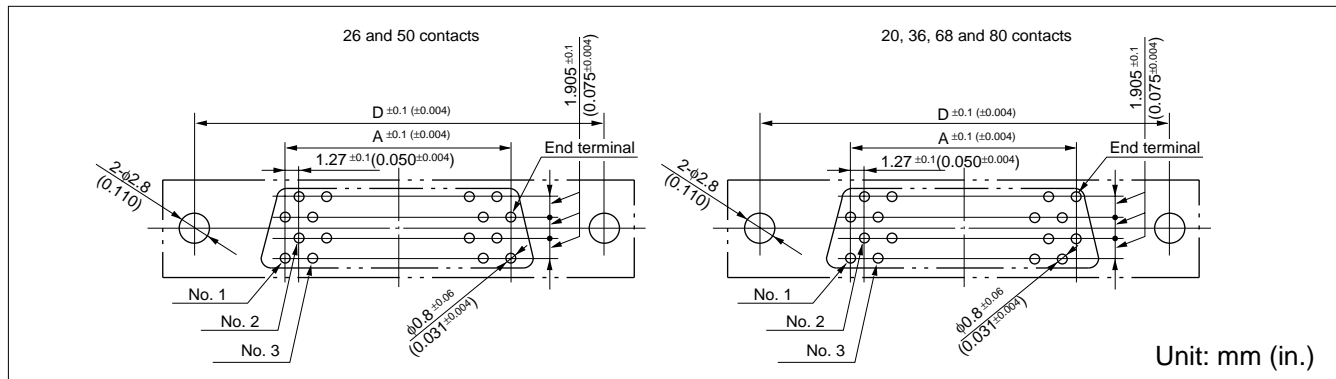


STRAIGHT SOCKET

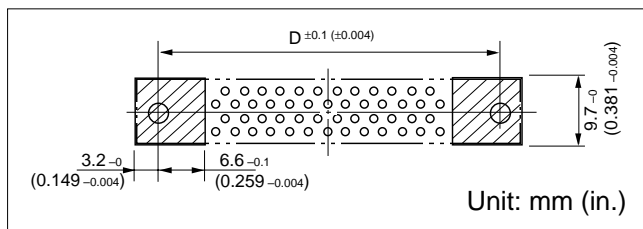
■ DIMENSIONS



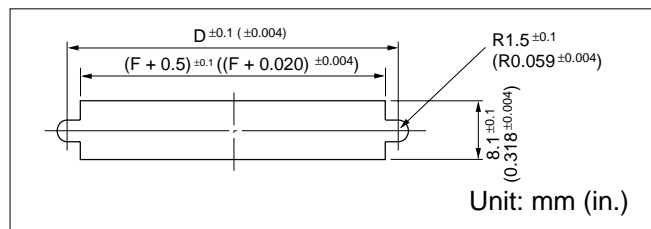
■ MOUNTING HOLE LAYOUT (COMPONENT SIDE)



■ PATTERN INHIBITED AREAS



■ RECOMMENDED PANEL DIMENSIONS



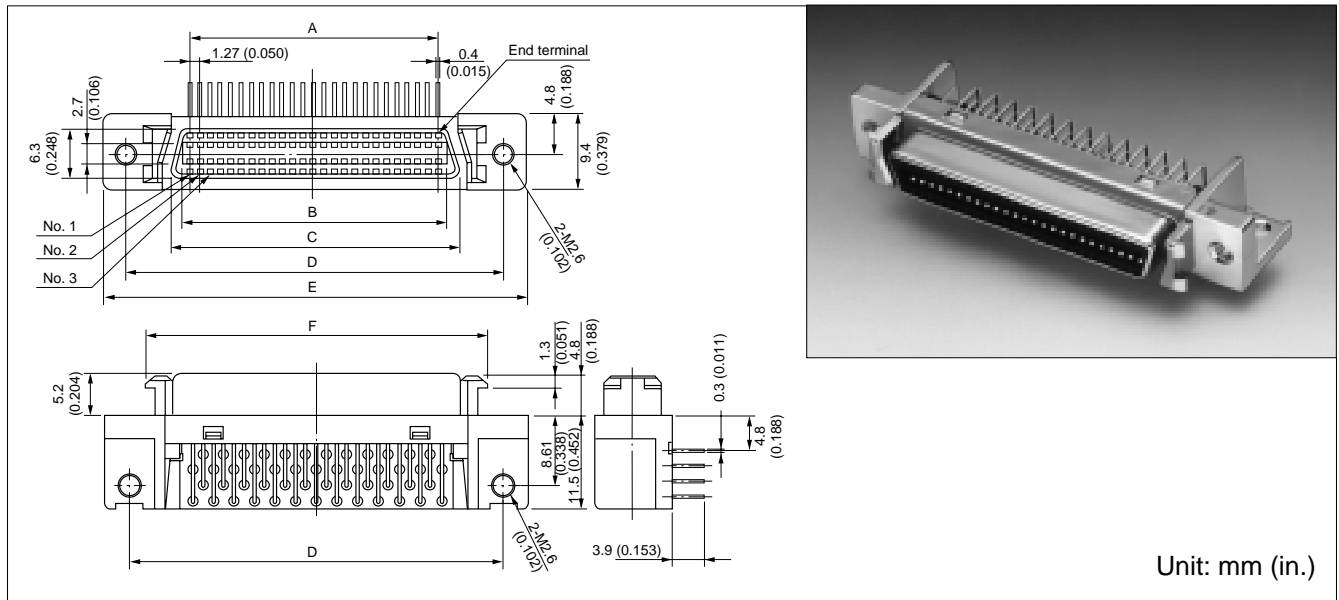
■ PART NUMBERS AND DIMENSIONS

Unit: mm (in.)

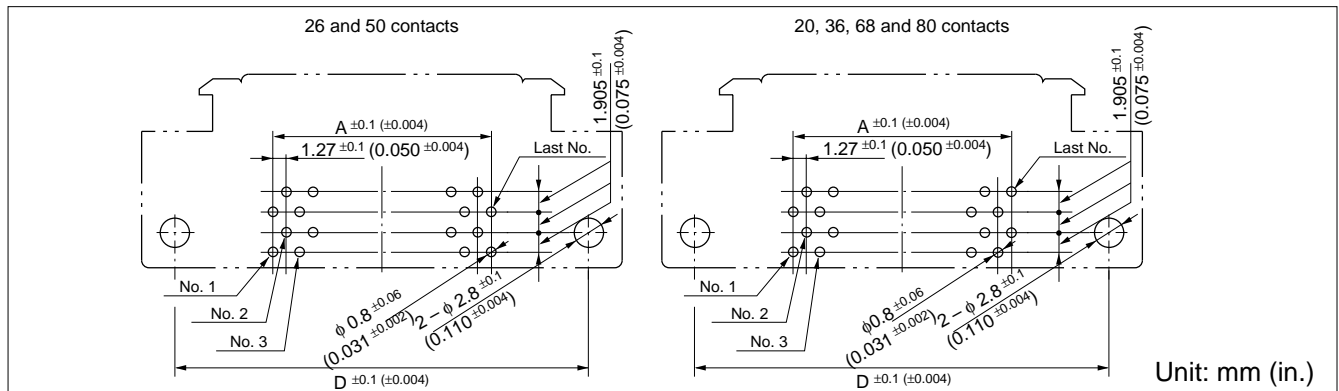
| Number of contacts | Part number | A | B | C | D | E | F |
|--------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 20 | FCN-244D020-G/E | 11.43 (0.450) | 13.45 (0.529) | 16.45 (0.647) | 27.45 (1.080) | 33.35 (1.312) | 23.30 (0.917) |
| 26 | FCN-244D026-G/E | 15.24 (0.600) | 17.26 (0.679) | 20.26 (0.797) | 31.26 (1.231) | 37.16 (1.462) | 27.11 (1.067) |
| 36 | FCN-244D036-G/E | 21.59 (0.850) | 23.61 (0.929) | 26.61 (1.047) | 37.61 (1.480) | 43.51 (1.712) | 33.46 (1.317) |
| 50 | FCN-244D050-G/E | 30.48 (1.200) | 32.50 (1.279) | 35.50 (1.397) | 46.50 (1.830) | 52.40 (2.062) | 42.35 (1.667) |
| 68 | FCN-244D068-G/E | 41.91 (1.650) | 43.93 (1.729) | 46.93 (1.847) | 57.93 (2.280) | 63.83 (2.512) | 53.78 (2.117) |
| 80 | FCN-244D080-G/E | 49.53 (1.950) | 51.55 (2.029) | 54.55 (2.147) | 65.55 (2.580) | 71.45 (2.812) | 61.40 (2.417) |

RIGHT-ANGLE SOCKET [METAL SHELL]

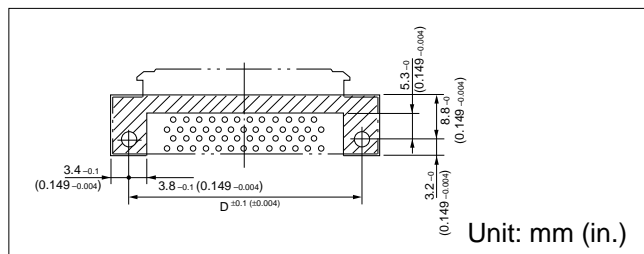
■ DIMENSIONS



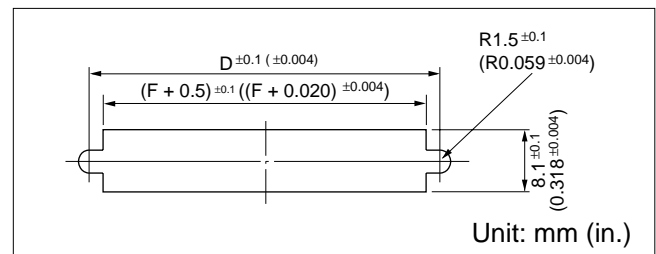
■ MOUNTING HOLE LAYOUT (COMPONENT SIDE)



■ PATTERN INHIBITED AREAS



■ RECOMMENDED PANEL DIMENSIONS



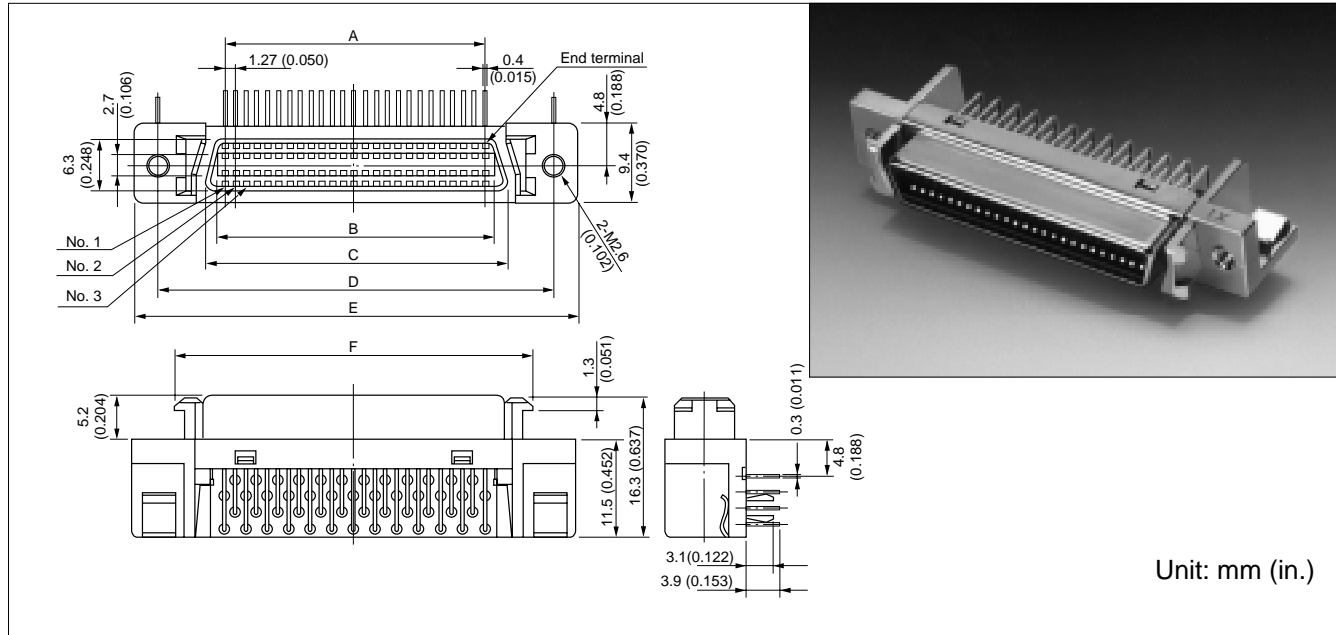
■ PART NUMBERS AND DIMENSIONS

Unit: mm (in.)

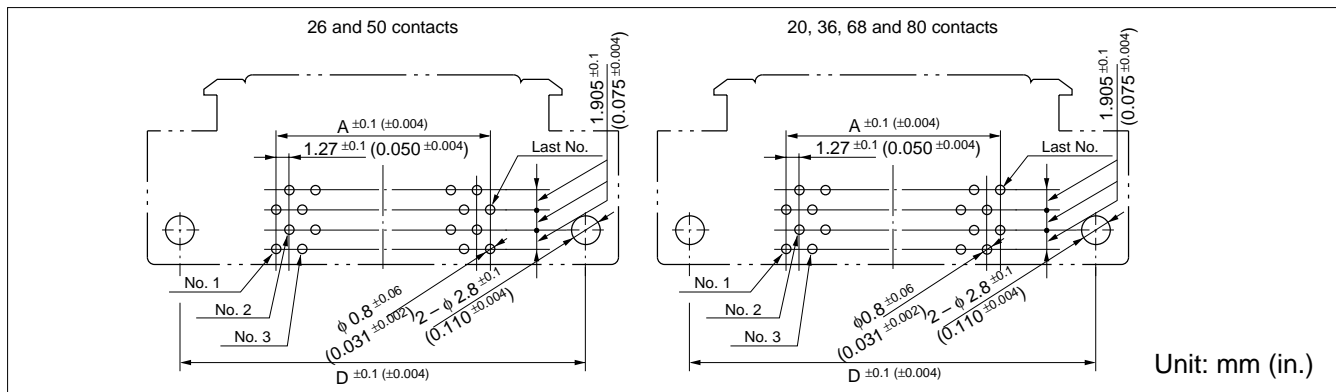
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|--------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|
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| 68 | FCN-245D068-G/E | 41.91 (1.650) | 43.93 (1.729) | 46.93 (1.847) | 57.93 (2.280) | 63.83 (2.512) | 53.78 (2.117) |
| 80 | FCN-245D080-G/E | 49.53 (1.950) | 51.55 (2.029) | 54.55 (2.147) | 65.55 (2.580) | 71.45 (2.812) | 61.40 (2.417) |

RIGHT-ANGLE SOCKET [METAL SHELL] (WITH BOARDLOCKS)

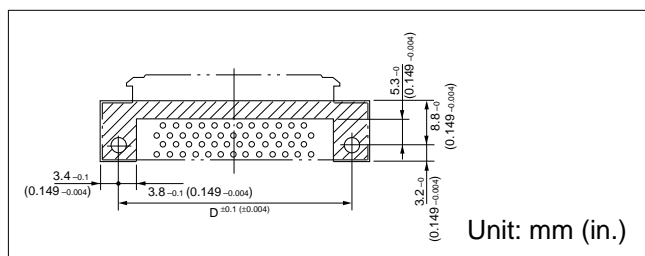
■ DIMENSIONS



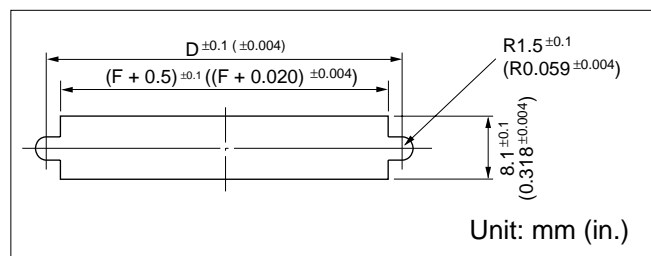
■ MOUNTING HOLE LAYOUT (COMPONENT SIDE)



■ PATTERN INHIBITED AREAS



■ RECOMMENDED PANEL DIMENSIONS



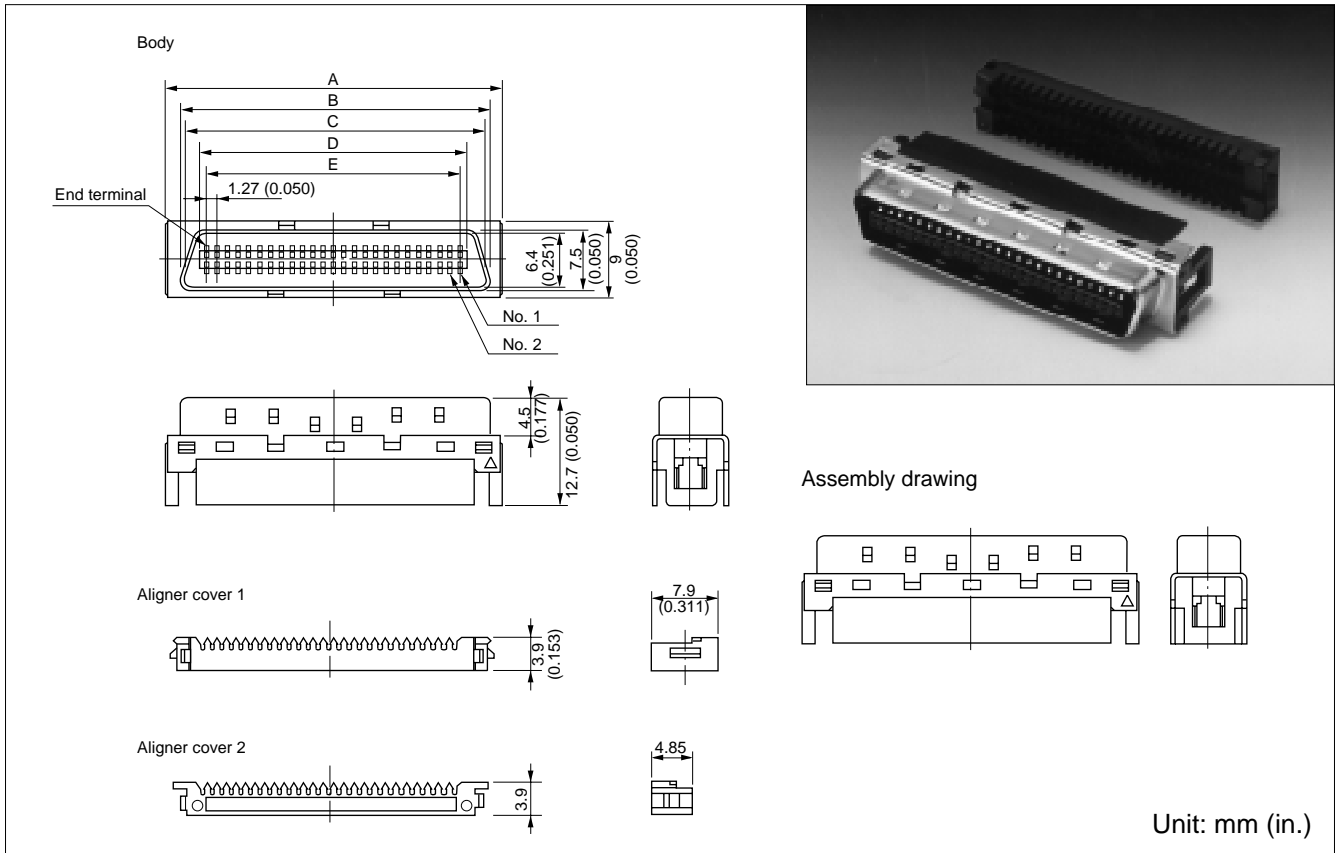
■ PART NUMBERS AND DIMENSIONS

Unit: mm (in.)

| Number of contacts | Part number | A | B | C | D | E | F |
|--------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 20 | FCN-245D020-G/H | 11.43 (0.450) | 13.45 (0.529) | 16.45 (0.647) | 27.45 (1.080) | 33.35 (1.312) | 23.30 (0.917) |
| 26 | FCN-245D026-G/H | 15.24 (0.600) | 17.26 (0.679) | 20.26 (0.797) | 31.26 (1.231) | 37.16 (1.462) | 27.11 (1.067) |
| 36 | FCN-245D036-G/H | 21.59 (0.850) | 23.61 (0.929) | 26.61 (1.047) | 37.61 (1.480) | 43.51 (1.712) | 33.46 (1.317) |
| 50 | FCN-245D050-G/H | 30.48 (1.200) | 32.50 (1.279) | 35.50 (1.397) | 46.50 (1.830) | 52.40 (2.062) | 42.35 (1.667) |
| 68 | FCN-245D068-G/H | 41.91 (1.650) | 43.93 (1.729) | 46.93 (1.847) | 57.93 (2.280) | 63.83 (2.512) | 53.78 (2.117) |
| 80 | FCN-245D080-G/H | 49.53 (1.950) | 51.55 (2.029) | 54.55 (2.147) | 65.55 (2.580) | 71.45 (2.812) | 61.40 (2.417) |

INSULATION DISPLACEMENT CONNECTION (IDC) PLUG

■ DIMENSIONS



■ PART NUMBERS AND DIMENSIONS

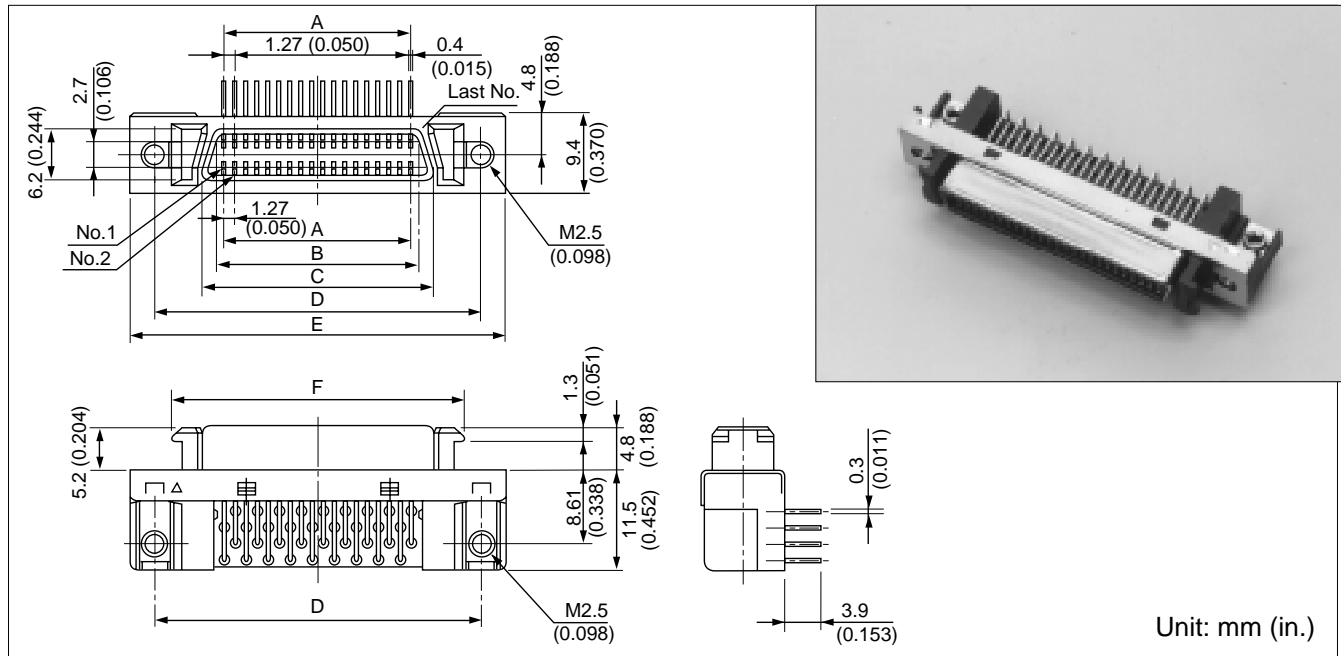
Unit: mm (in.)

| Number of contacts | Insulation diameter of applicable wire | Part number | A | B | C | D | E |
|--------------------|--|-----------------|---------------|---------------|---------------|---------------|---------------|
| 20 | φ0.5 to 0.65 mm | FCN-247R020-G/E | 21.24 (0.836) | 17.55 (0.690) | 16.55 (0.651) | 13.25 (0.521) | 11.43 (0.450) |
| 26 | φ0.5 to 0.65 mm | FCN-247R026-G/E | 25.05 (0.986) | 21.36 (0.840) | 20.36 (0.801) | 17.06 (0.671) | 15.24 (0.600) |
| 36 | φ0.5 to 0.65 mm | FCN-247R036-G/E | 31.40 (1.236) | 27.71 (1.090) | 26.71 (1.051) | 23.41 (0.921) | 21.59 (0.850) |
| 50 | φ0.5 to 0.65 mm | FCN-247R050-G/E | 40.29 (1.586) | 36.60 (1.440) | 35.60 (1.401) | 32.30 (1.271) | 30.48 (1.200) |
| 68 | φ0.5 to 0.65 mm | FCN-247R068-G/E | 51.72 (2.036) | 48.03 (1.890) | 47.03 (1.851) | 43.73 (1.721) | 41.91 (1.650) |
| 80 | φ0.5 to 0.65 mm | FCN-247R080-G/E | 59.34 (2.336) | 55.65 (2.190) | 54.65 (2.151) | 51.35 (2.021) | 49.53 (1.950) |

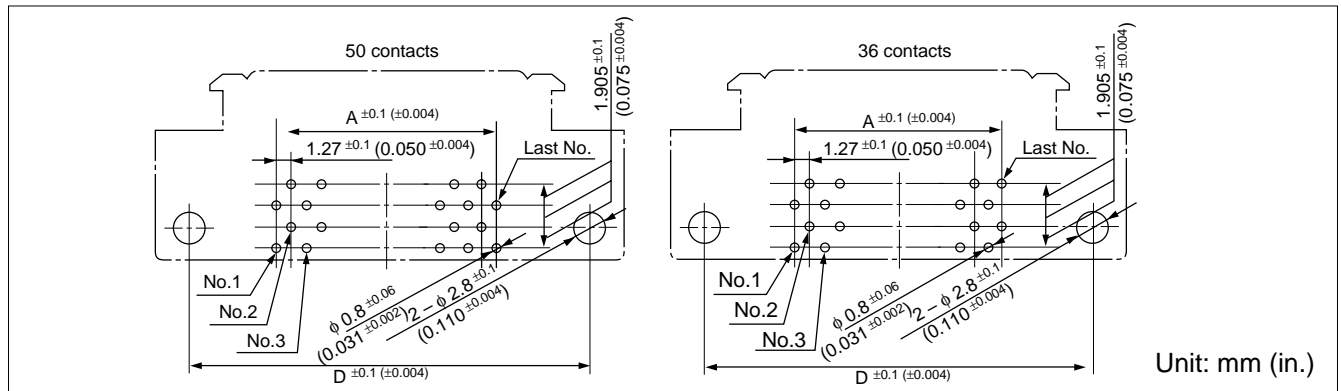
50-contact connectors for IDC of wires with φ0.8 mm (0.031 in.) to φ0.88 mm (0.035 in.) insulation diameter are also available. Specify a part number by replacing -G/E at the end with -G/F.

RIGHT-ANGLE SOCKET [LIGHTWEIGHT TYPE]

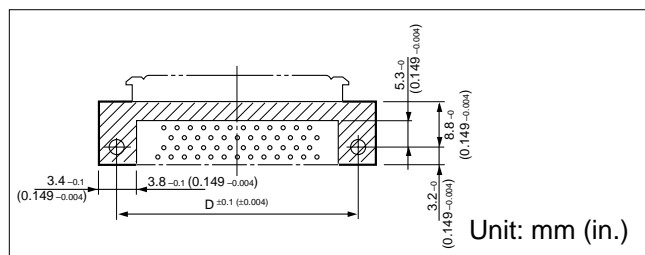
■ DIMENSIONS



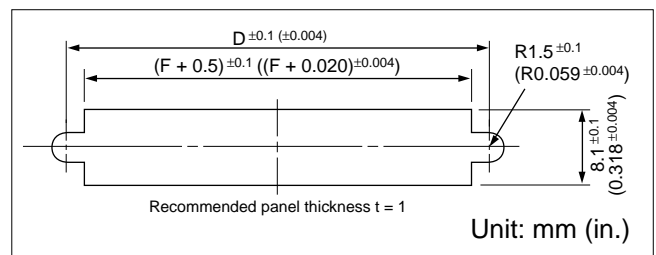
■ MOUNTING HOLE LAYOUT (COMPONENT SIDE)



■ PATTERN INHIBITED AREAS



■ RECOMMENDED PANEL DIMENSIONS



■ PART NUMBERS AND DIMENSIONS

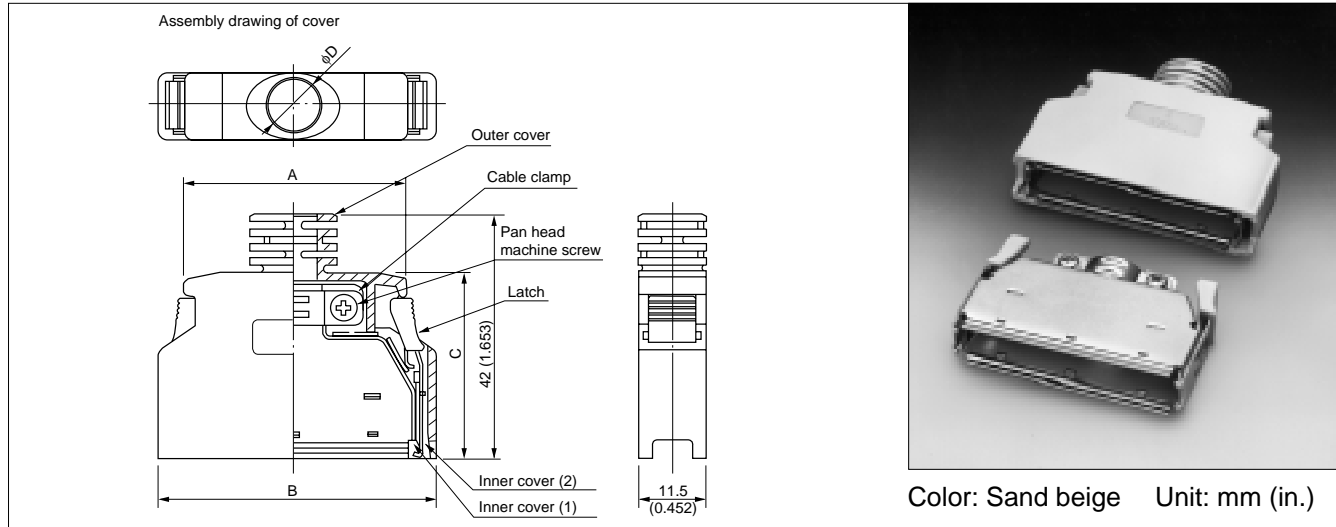
Unit: mm (in.)

| Number of contacts | Part number | A | B | C | D | E | F |
|--------------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 36 | FCN-245D036-L/L | 21.59 (0.850) | 23.61 (0.929) | 26.61 (1.047) | 37.61 (1.480) | 43.51 (1.712) | 33.46 (1.317) |
| 50 | FCN-245D050-L/L | 30.48 (1.200) | 32.50 (1.279) | 35.50 (1.397) | 46.50 (1.830) | 52.40 (2.062) | 42.35 (1.667) |

* This socket is 40% lighter than a socket with die cast shell.

EMI/ESD RESISTANT COVER

■ DIMENSIONS



■ PART NUMBERS AND DIMENSIONS

Unit: mm (in.)

| Number of contacts | Part number | A | B | C | D |
|--------------------|-----------------|---------------|---------------|---------------|-------------|
| 20 | FCN-240C020-A/S | 19.95 (0.785) | 29.65 (1.167) | 34.50 (1.358) | 6.8 (0.268) |
| 26 | FCN-240C026-A/S | 23.76 (0.935) | 33.46 (1.317) | 38.31 (1.508) | 7.1 (0.280) |
| 36 | FCN-240C036-A/S | 30.11 (1.185) | 39.81 (1.507) | 32.00 (1.259) | 8.2 (0.323) |
| 50 | FCN-240C050-A/S | 39.00 (1.535) | 48.70 (1.917) | 32.00 (1.259) | 9.0 (0.354) |
| | FCN-240C050-E/S | | | | 9.8 (0.386) |
| 68 | FCN-240C068-A/S | 50.43 (1.985) | 60.13 (2.367) | 32.00 (1.259) | 9.1 (0.358) |
| 80 | FCN-240C080-A/S | 58.05 (2.285) | 67.75 (2.667) | 32.00 (1.259) | 9.7 (0.382) |

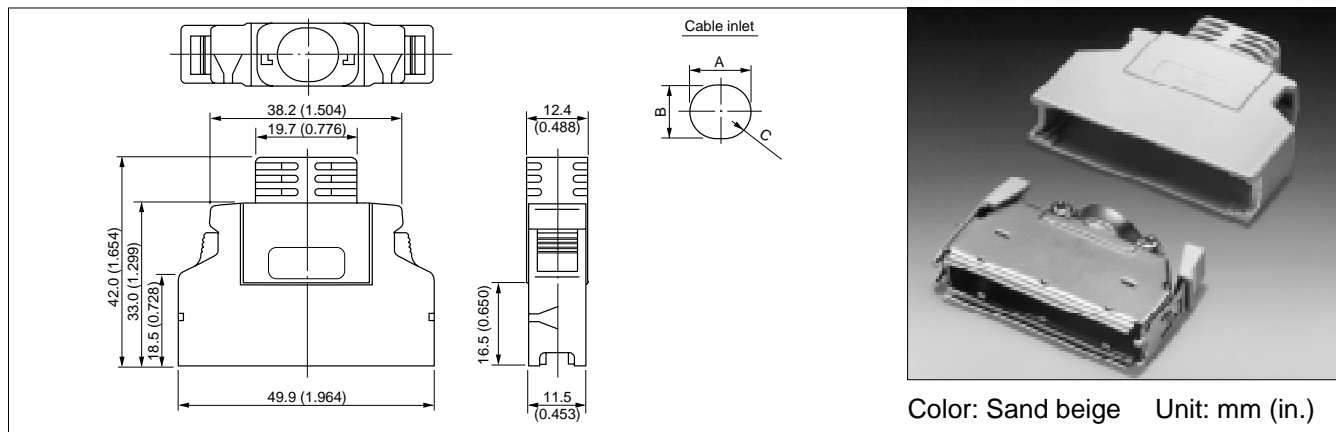
*: The standard color of the EMI/ESD resistant covers is sand beige, but black, ivory, and art gray are also available. Specify a part number as follows:

Black: FCN-240C□□□-Δ/S-K0. Ivory: FCN-240C□□□-Δ/S-C0. Art gray: FCN-240C□□□-Δ/S-A0.

□□□: Number of contacts. Δ: Cover type.

WIDE-HOLE COVER FOR SCSI CABLES

■ DIMENSIONS



■ PART NUMBERS AND DIMENSIONS

| Part number | Cable inlet | |
|-----------------|---------------|------|
| | A × B | C |
| FCN-240C050-B/S | 12.45 × 11.00 | R5.5 |
| FCN-240C050-D/S | 11.05 × 9.40 | R4.7 |

*: The standard color of the EMI/ESD resistant covers is sand beige, but black, ivory, and art gray are also available. Specify a part number as follows:

Black: FCN-240C□□□-Δ/S-K0. Ivory: FCN-240C□□□-Δ/S-C0.

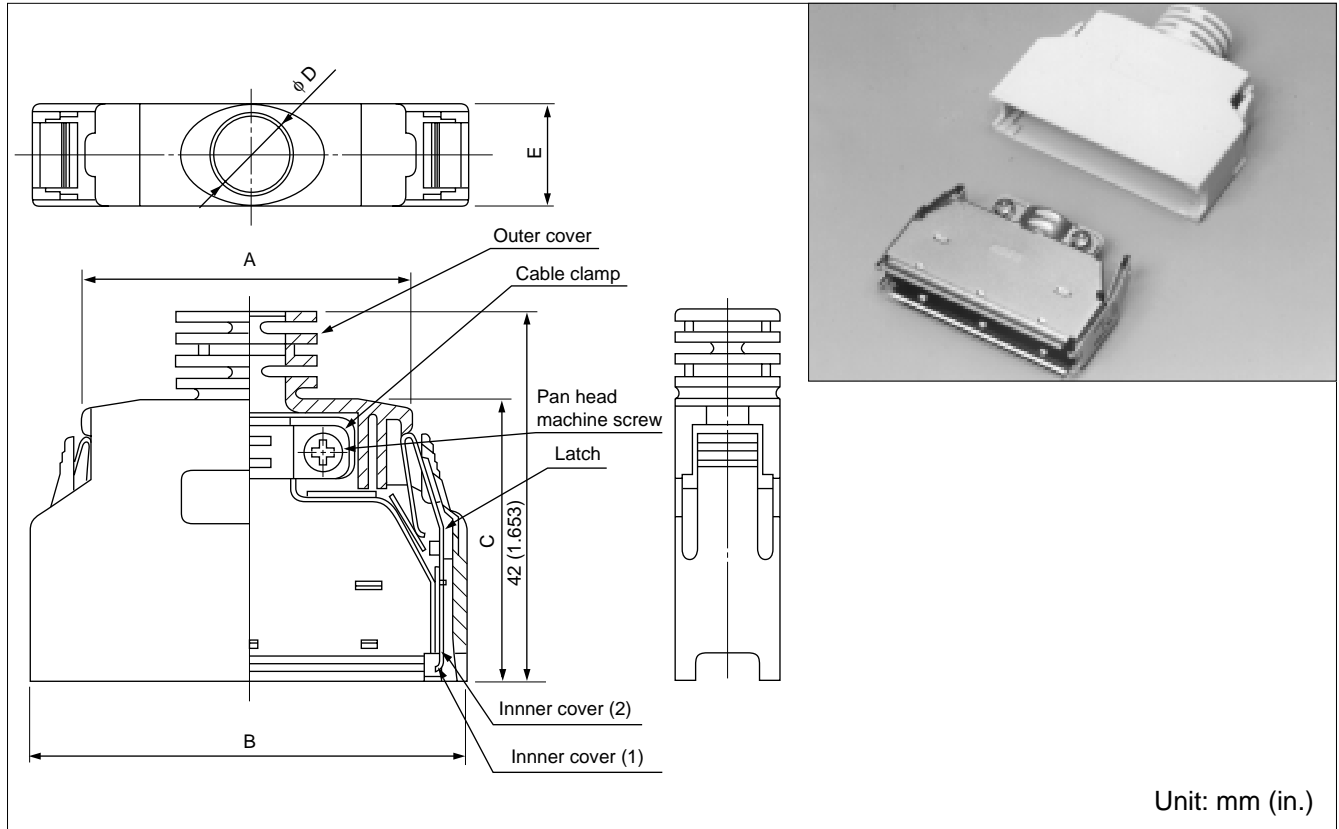
Art gray: FCN-240C□□□-Δ/S-A0.

□□□: Number of contacts. Δ: Cover type.

240R Series

EMI/ESD RESISTANT COVER, LATCH-ON-HOOD TYPE

■ DIMENSIONS



■ PART NUMBERS AND DIMENSIONS

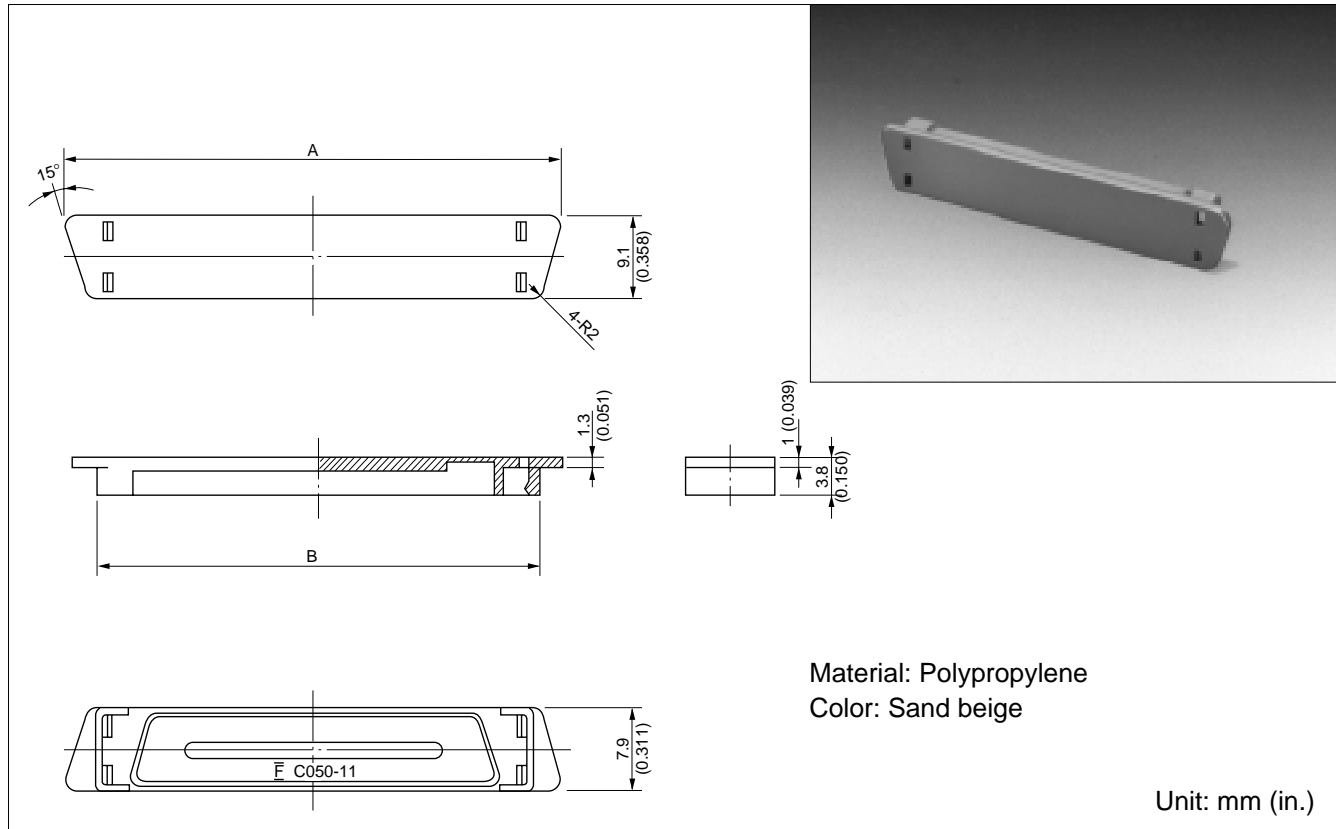
Unit: mm (in.)

| Number of contacts | Part number | A | B | C | D | E |
|--------------------|------------------|---------------|---------------|---------------|-------------|--------------|
| 36 | FCN-240C036-A/SC | 29.11 (1.146) | 39.81 (1.567) | 32.00 (1.259) | 8.2 (0.223) | 11.5 (0.223) |
| 50 | FCN-240C050-A/SC | 38.00 (1.496) | 48.70 (1.917) | 32.00 (1.259) | 9.0 (0.223) | 11.5 (0.223) |
| | FCN-240C050-E/SC | | | | 9.8 (0.223) | 11.4 (0.223) |

ACCESSORY (DUST CAP FOR SOCKET) (230R SERIES AND 240R SERIES)

Used to prevent dust from entering the contact section of a plug connector.

■ DIMENSIONS

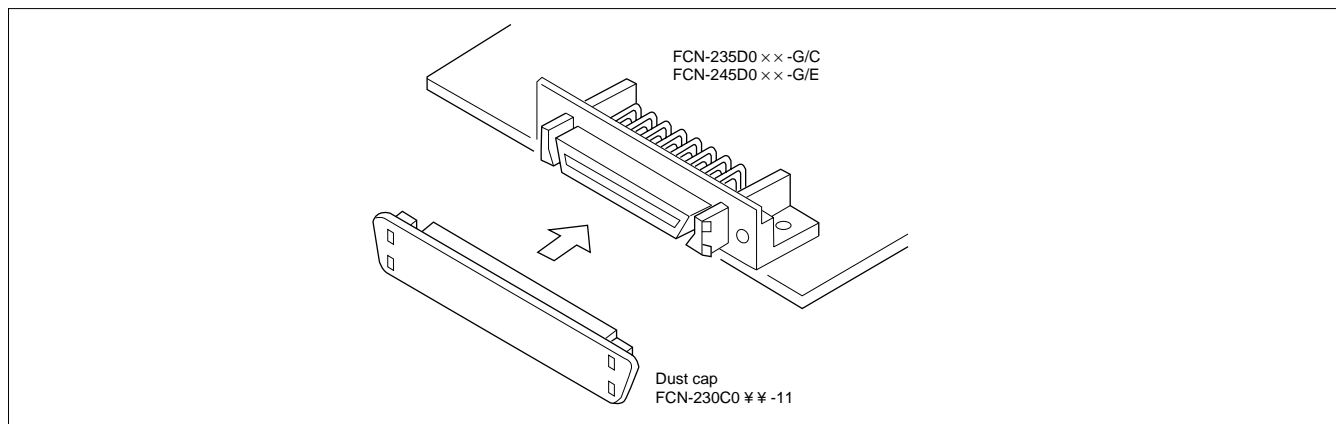


■ PART NUMBERS AND DIMENSIONS

Unit: mm (in.)

| Number of contacts | Part number | A | B |
|--------------------|----------------|--------------|--------------|
| 28 | FCN-230C028-11 | 35.7 (1.406) | 30.1 (1.185) |
| 36 | FCN-230C036-11 | 40.8 (1.606) | 35.2 (1.386) |
| 50 | FCN-230C050-11 | 49.7 (1.957) | 44.1 (1.736) |
| 68 | FCN-230C068-11 | 61.1 (2.406) | 55.5 (2.185) |

■ APPLICATIONS



CABLE ASSEMBLY TOOLS

The following tools are needed to assemble FCN-230/230R/240/240R series connectors.

- Cable aligner (semiautomatic cable aligner or hand tool)
- IDC tool

1. Cable Aligner

| Item | Semiautomatic cable aligner | | | Hand tool |
|----------|-----------------------------|--------------|----------------|-----------------|
| | Body/Controller | Bed | Adaptor | |
| FCN-237J | FCN-M561-A/C | FCN-P560-2/A | FCN-K560-A-xxx | FCN-237T-T062/H |
| FCN-237R | | | FCN-K560-R-xxx | |
| FCN-247J | | | FCN-K560-K-xxx | |
| FCN-247R | | FCN-P560-2/J | FCN-K560-J-xxx | FCN-247T-T061/H |

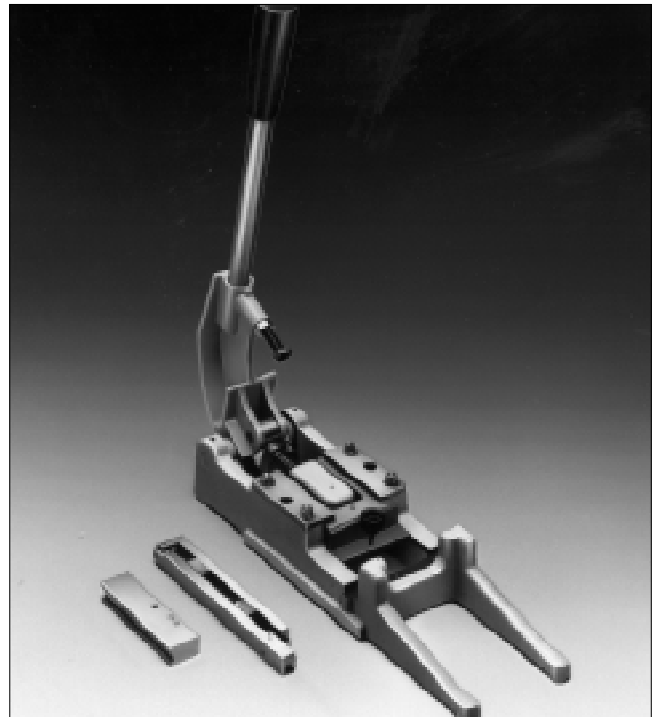
xxx indicates the number of contacts.

2. Insulation Displacement Connection (IDC) tool

| Item | Hand press | Head/Table |
|----------|-----------------|-----------------|
| FCN-237J | FCN-237T-T109/H | FCN-237T-T064/H |
| FCN-237R | | FCN-237T-T067/H |
| FCN-237D | | FCN-237T-T075/H |
| FCN-247J | | FCN-247T-T066/H |
| FCN-247R | | FCN-247T-T068/H |
| FCN-247D | | FCN-247T-T077/H |



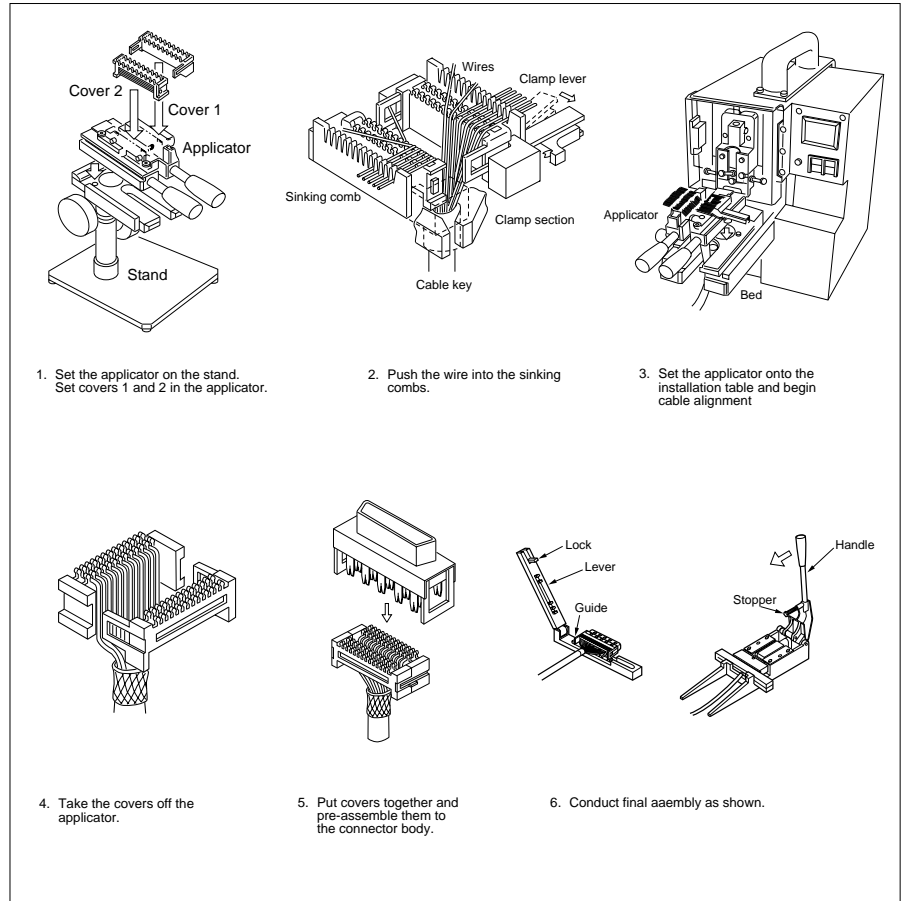
• Cable aligner



• Insulation displacement connection (IDC) tool

240R Series

**Semi-Automatic Tools
Cable Aligning Machine
Main Body (FCN-M551-120, FCN-M551-220)**



Head (FCN-H550-1/A)



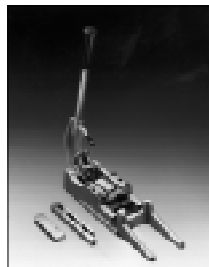
Stand (FCN-D550)



Applicator (FCN-A550-1/A-xxx)



IDC Tool (FCN-237T-T109/H,
FCN-237T-T067/H locator)



FCN-240R SERIES IDC ROUND-CABLE CONNECTORS

SOCKET: FCN-247R***-G/E (***: 020, 026, 036, 050, 068, 080)

| Pos No. | Applied Wire (wire Dia.: mm) | Connector Part number | Cable Aligner | | IDC Tool |
|---------------|---------------------------------|---|-----------------|--------------|--|
| | | | Hand Tool | Semi-Auto | |
| 20 68 | #28 to #30 (0.5 to 0.65) | FCN-247R020-G/E FCN-247R080-G/E | FCN-247T-T061/H | (See below*) | HAND PRESS: FCN-237T-T109/H HEAD & Locator: FCN-237T-T067/H |

Semi-automatic-Medium Level
 Body: :FCN-M551-120
 Head Assembly: :FCN-H550
 Applicator: :FCN-A550-1/J-***(***: 020, 028, 036, 050, 068, 080)
 Stand: :FCN-D550

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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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