

FOR CONNECTING PC BOARD TO PC BOARD

FCN-260(H) SERIES (SUPPORTS HIGH-SPEED SIGNALS)

■ FEATURES

- Ground contacts are between rows of signal terminals and the connector is covered with a metal ground shell, for impedance matching and low cross talk (strip line structure (100 contacts)).
- Inter-fitting part has a 1.27 mm (0.050 in.) pitch and two rows, which makes high density packaging possible.
- When PC boards are connected in parallel (stacking), the PC board space is 18.7 mm (0.736 in.).
- Two stack heights are available:
 - 10.92 mm (0.430 in.)
 - 18.69 mm (0.736 in.)



■ SPECIFICATIONS

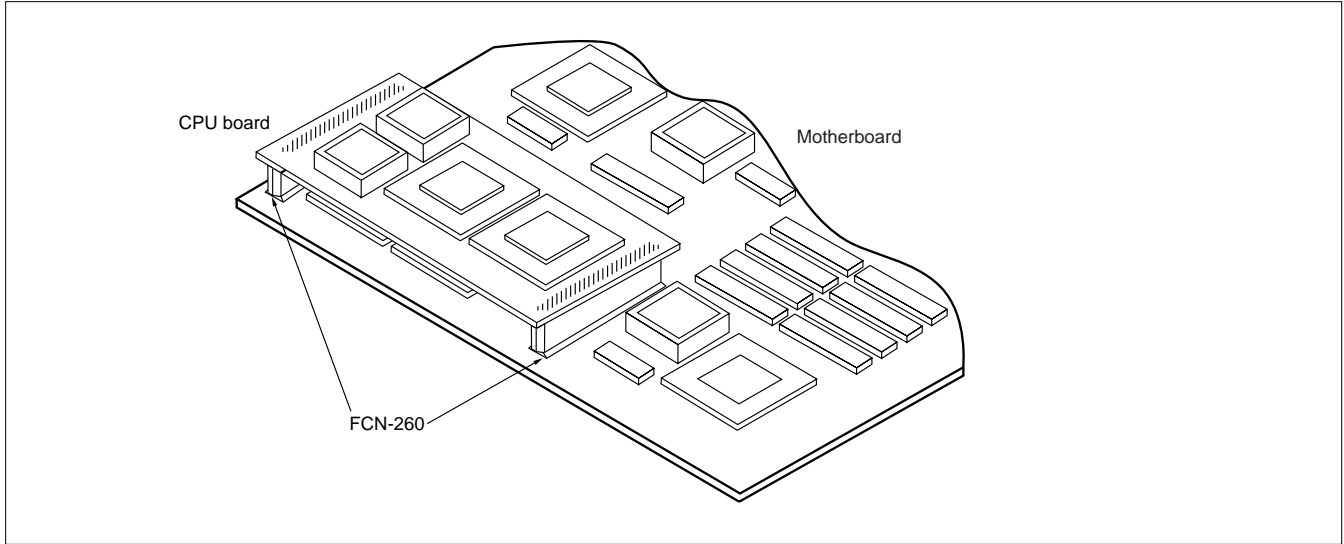
| Item | Specification |
|------------------------------|--|
| Operating temperature range | -55° to +105 ° C |
| Current rating | Signal terminal: 1A Ground terminal: 10A |
| Voltage rating | 250V AC |
| Contact resistance | Signal terminal: 40mΩ max (6V DC, 0.1 A) Ground terminal: 20mΩ max |
| Insulation resistance | 100MΩ or more (500V DC) |
| Dielectric withstand voltage | 500V AC for one minute |
| Characteristic impedance | 50Ω ± 5Ω (TDR) |
| Crosstalk | Near end: 5% max. Far end: 3% max. |
| Insertion/extraction force | Insertion: 5 kg max. (100 contacts) extraction: 1.5 kg max (100 contacts) |

■ MATERIALS AND PLATING

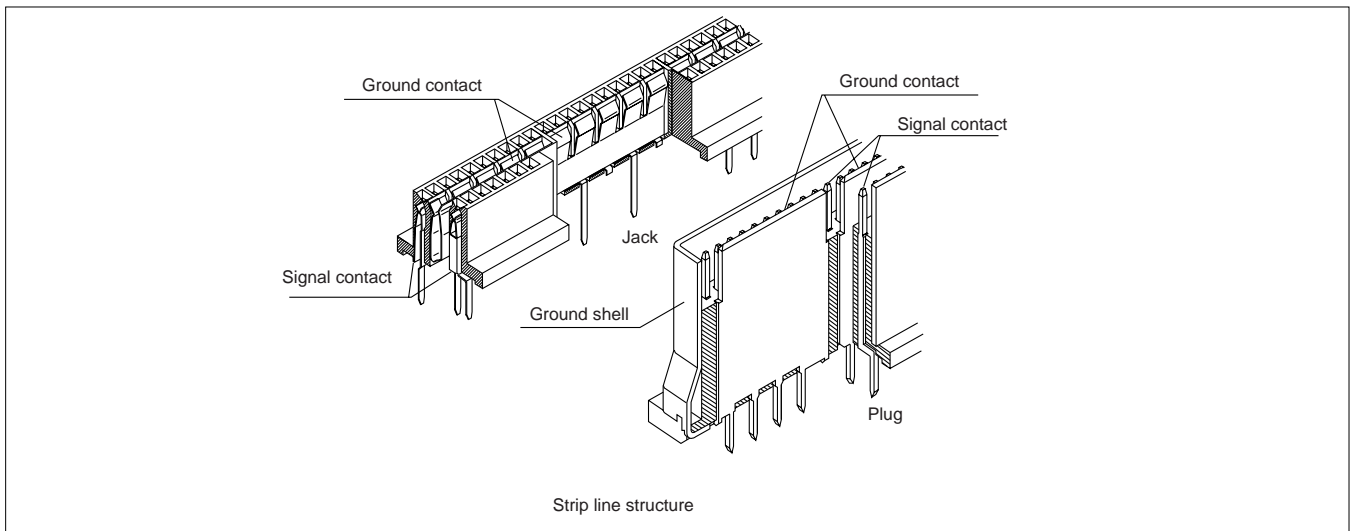
| Item | Material |
|-----------|--|
| Insulator | LCP |
| Conductor | Plug: phosphor bronze Socket: gold (PAGOS®) |
| Plating | Contact: PAGOS® Terminal: palladium |

260 (H) Series (supports high-speed signals)

■ EXAMPLE



■ CONNECTOR STRUCTURE

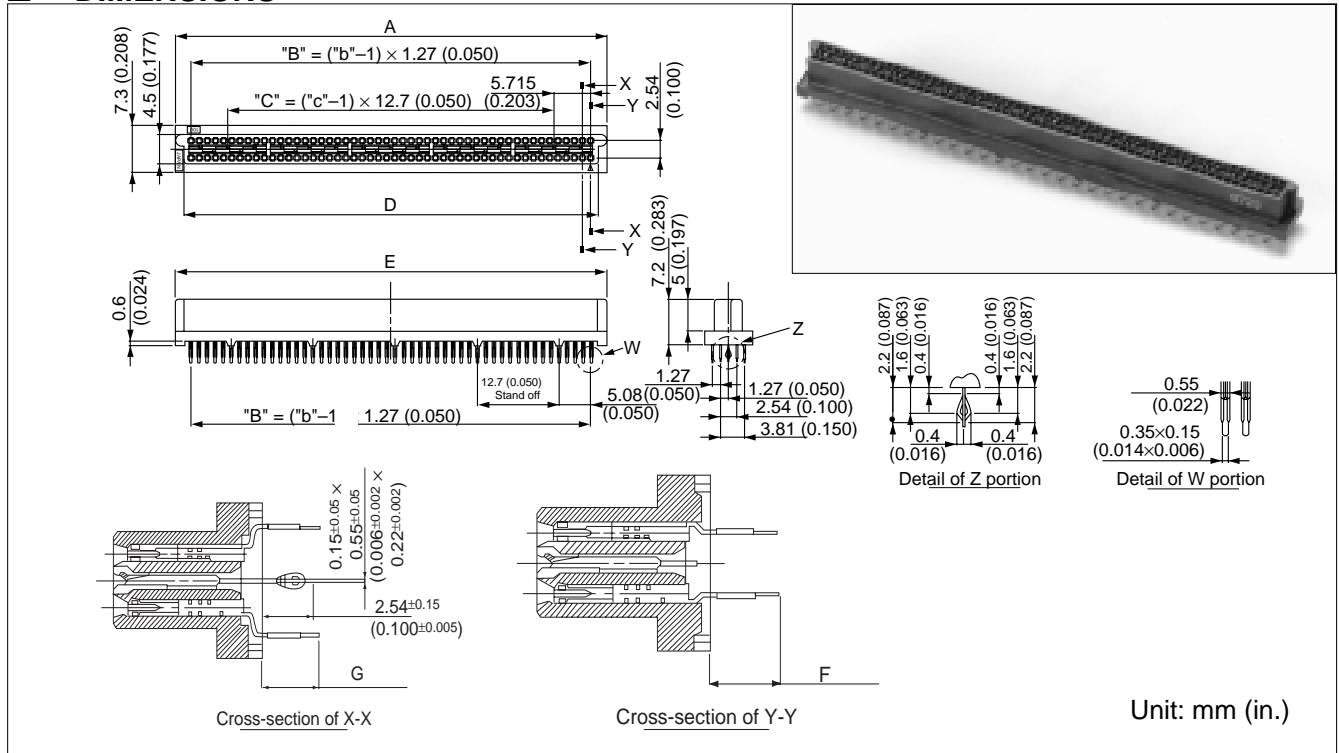


| Characteristic | 1 to 1 | Coaxial | Microstrip | Stripline |
|--------------------|--|--|---|---|
| Crosstalk | X | ⊙ | Δ | ○ |
| Impedance Matching | X | ○ | ○ | ○ |
| High Density | ○ | X | ○ | ○ |
| Shape | <pre> S G S G □ ■ □ ■ G S G S ■ □ ■ □ </pre> | <pre> G S G S ○ ○ ○ ○ G S G S ○ ○ ○ ○ </pre> | <pre> S S S S □ □ □ □ G ██████████ S S S S □ □ □ □ </pre> | <pre> G S S S S □ □ □ □ G ██████████ S S S S G □ □ □ □ </pre> |
| Applicable Product | | | 260 Series 120 contacts | 260 Series 100 contacts |

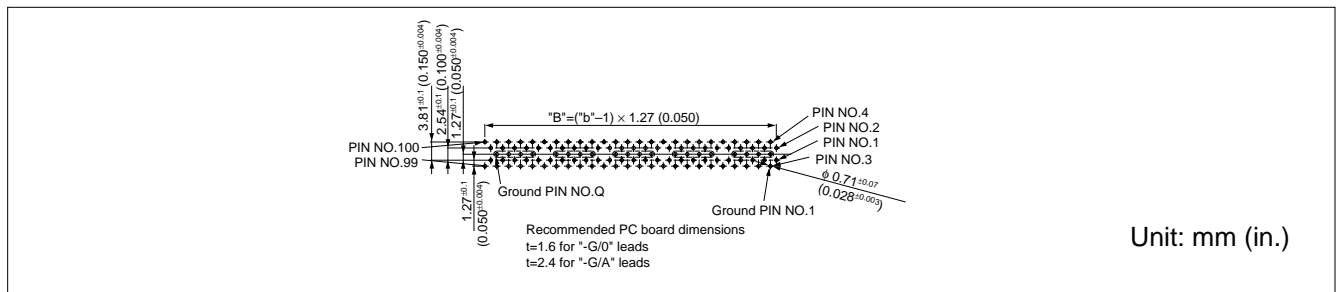
260 (H) Series (supports high-speed signals)

STRAIGHT SOCKET

DIMENSIONS



MOUNTING HOLE LAYOUT



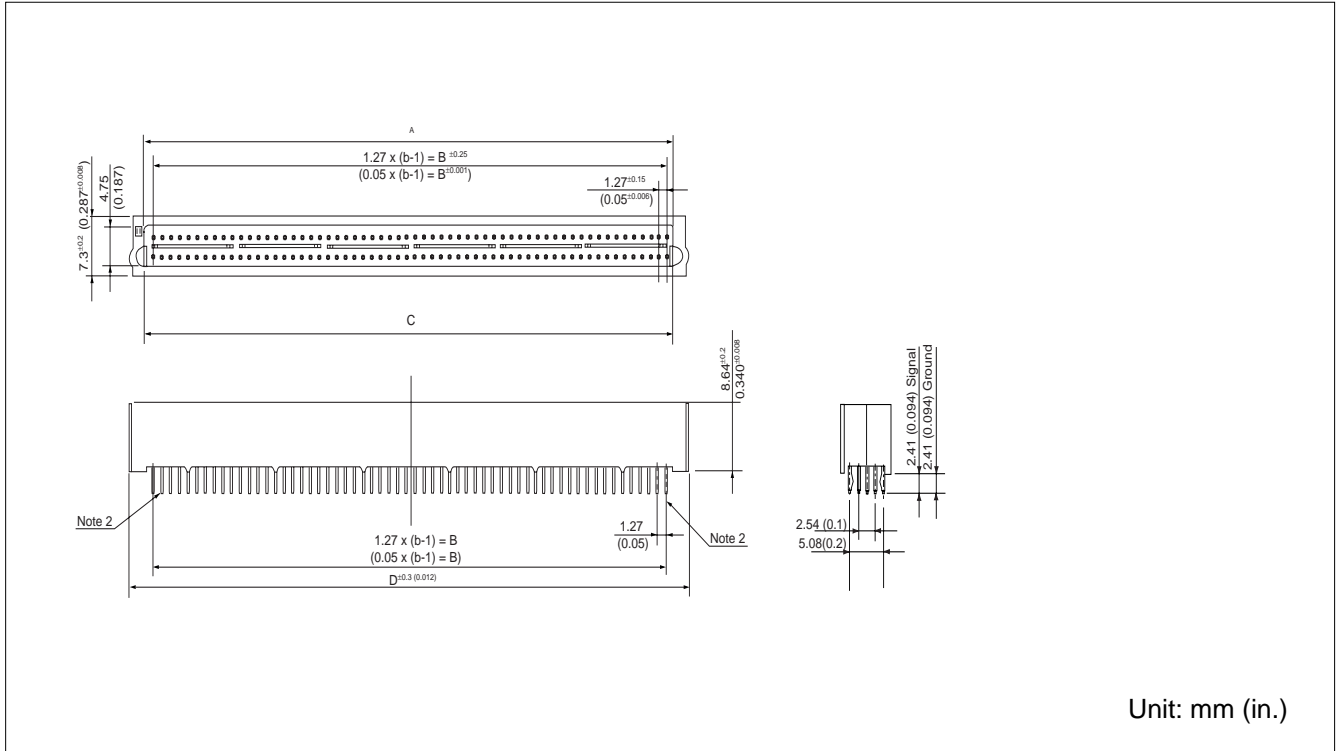
ORDERING PART NUMBER AND DIMENSIONS

| No. of Contacts | Part Number | Dimensions: mm (in.) | | | | | | | | | |
|-----------------|-----------------|----------------------|-----------------|---------------|------------------|---------------|----------------|-----------------|------------------|-------------------------|----------------|
| | | Q | A | b | B | c | C | D | E | F | G |
| 100 | FCN-264J100-G/0 | 20 (0.787) | 67.1 (2.64) | 50 (1.97) | 62.23 (2.45) | 5 (0.197) | 50.8 (2.00) | 64.5 (2.54) | 66.9 (2.63) | 2.54±0.13 (.10±.005) | 2.8 (0.110) |
| 100 | FCN-264J100-G/A | 20 (0.787) | 67.1 (2.64) | 50 (1.97) | 62.23 (2.45) | 5 (0.197) | 50.8 (2.00) | 64.5 (2.54) | 66.9 (2.63) | 3.05±0.13 (.12±.005) | 3.3 (0.129) |
| 120 | FCN-264J120-G/0 | 24 (.945) | 79.8 (3.14) | 60 (2.36) | 74.93 (2.95) | 6 (.236) | 63.5 (2.50) | 77.2 (3.04) | 79.6 (3.13) | 2.54±0.13 (.10±.005) | 2.8 (0.110) |
| 120 | FCN-264J120-G/A | 24 (.945) | 79.8 (3.14) | 60 (2.36) | 74.93 (2.95) | 6 (.236) | 63.5 (2.50) | 77.2 (3.04) | 79.6 (3.13) | 3.05±0.13 (.12±.005) | 3.3 (0.129) |
| 140 | FCN-264J140-G/0 | 28 (1.10) | 92.5 (3.64) | 70 (2.75) | 87.63 (3.45) | 7 (.276) | 76.2 (2.99) | 89.9 (3.54) | 92.3 (3.63) | 2.54±0.13 (.10±.005) | 2.8 (0.110) |
| 160 | FCN-264J160-G/0 | 32 (1.26) | 105.2 (4.14) | 80 (3.15) | 100.33 (3.95) | 8 (.315) | 88.9 (3.5) | 102.6 (4.04) | 105.0 (4.13) | 2.54±0.13 (.10±.005) | 2.8 (0.110) |
| 180 | FCN-264J180-G/0 | 36 (1.42) | 117.9 (4.64) | 90 (3.54) | 113.03 (4.06) | 9 (0.354) | 101.6 (4) | 115.3 (4.54) | 117.7 (4.63) | 2.54±0.13 (.10±.005) | 2.8 (0.110) |
| 200 | FCN-264J200-G/0 | 40 (1.58) | 130.6 (5.14) | 100 (3.98) | 125.73 (4.95) | 10 (0.394) | 114.3 (4.5) | 128.0 (5.04) | 130.4 (5.13)s | 2.54±0.13 (.10±.005) | 2.8 (0.110) |

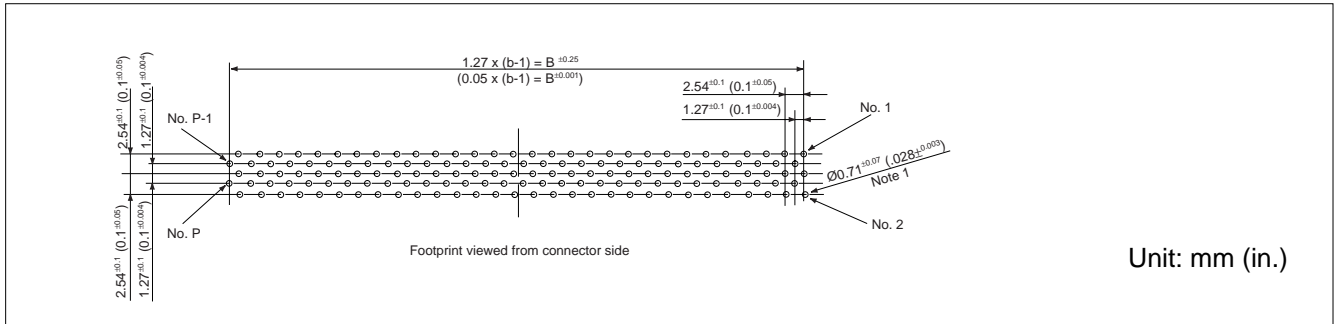
260 (H) Series (supports high-speed signals)

VERTICAL MOUNT / PLUG

DIMENSIONS



MOUNTING HOLE LAYOUT



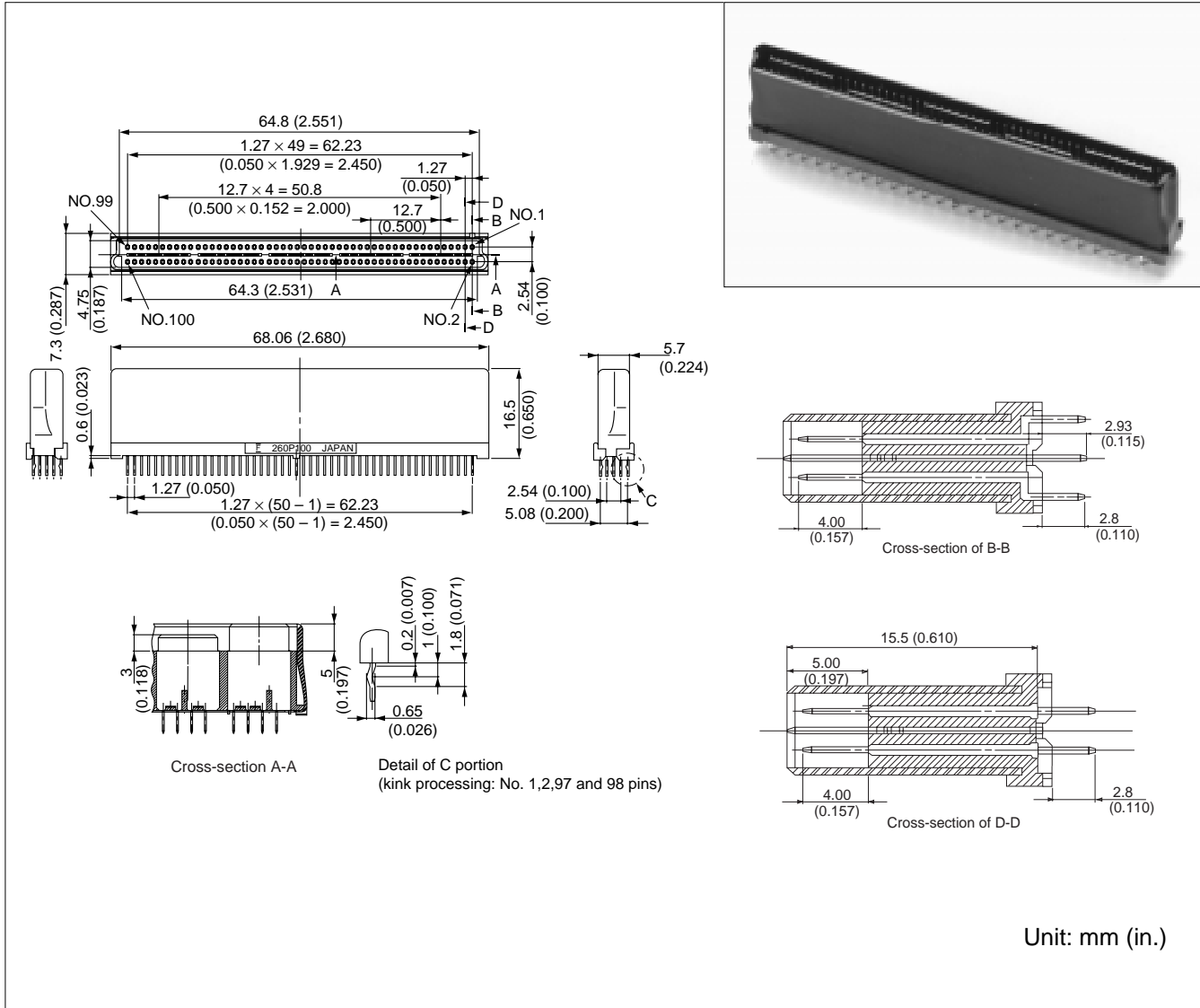
ORDERING PART NUMBER AND DIMENSIONS

| No. of Contacts | Part Number | Dimensions: mm (in.) | | | | | Arrangement Note 6 |
|-----------------|------------------|----------------------|----------------|------------------|------------------|-------------------|--------------------|
| | | A | b | B | C | D | |
| 120 | FCN-264P120-G/0S | 77.5 (3.051) | 60 (2.362) | 74.93 (1.887) | 77.0 (3.031) | 81.56 (3.211) | GPGGPG |
| 140 | FCN-264P140-G/0S | 90.2 (3.551) | 70 (2.756) | 87.63 (3.45) | 89.7 (3.351) | 94.26 (3.711) | GP GPGPG |
| 160 | FCN-264P160-G/0S | 102.9 (4.051) | 80 (3.15) | 100.33 (3.95) | 102.4 (4.017) | 106.96 (4.211) | GPGPPGPG |
| 180 | FCN-264P180-G/0S | 115.6 (4.551) | 90 (3.543) | 113.03 (4.45) | 115.1 (4.531) | 119.66 (4.711) | GPGPGPGPG |
| 200 | FCN-264P200-G/0S | 128.3 (5.051) | 100 (3.937) | 125.73 (4.95) | 127.8 (5.031) | 132.36 (5.211) | GPGPGGPGPG |

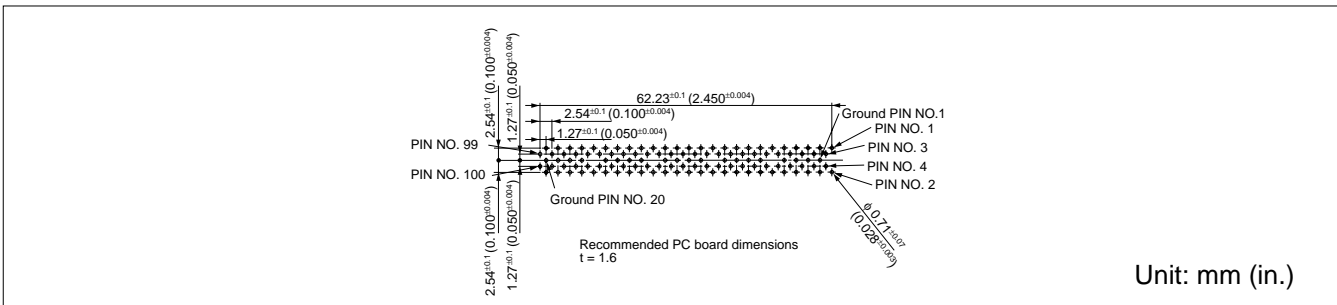
260 (H) Series (supports high-speed signals)

STRAIGHT PLUG

■ DIMENSIONS



■ MOUNTING HOLE DIMENSIONS



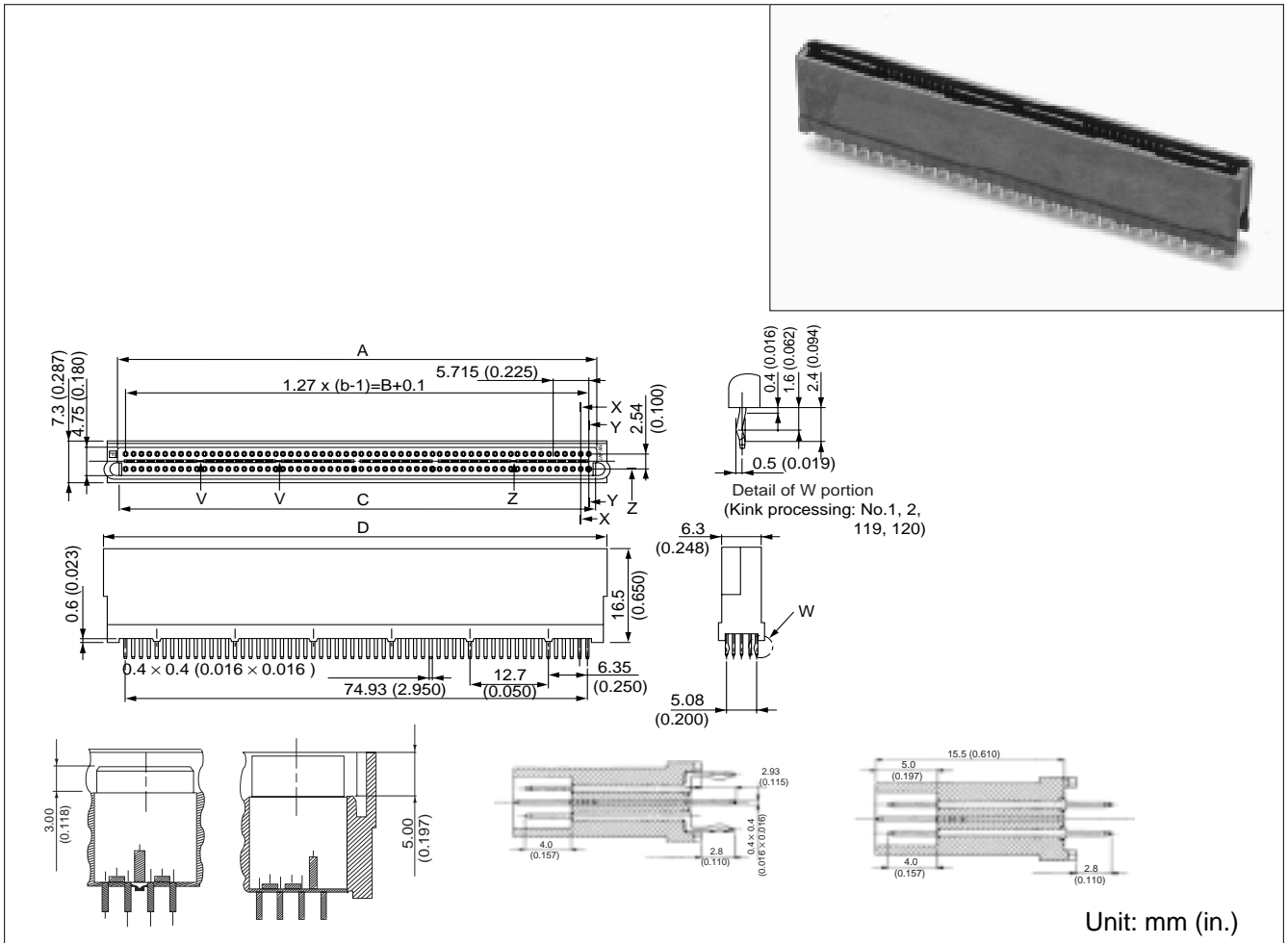
■ PART NUMBER

FCN-264P100-G/C

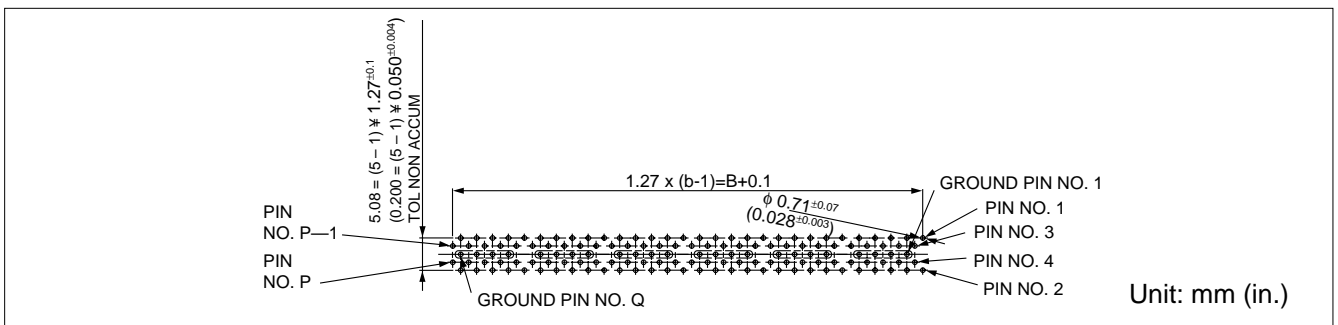
260 (H) Series (supports high-speed signals)

STRAIGHT PLUG

■ DIMENSIONS



■ MOUNTING HOLE DIMENSIONS



■ PART NUMBER

| Part Number | Dimensions: mm (in.) | | | | |
|------------------|----------------------|-----------|--------------|-------------|--------------|
| | A | b | B | C | D |
| FCN-264P120-G /J | 77.5 (3.05) | 60 (2.36) | 74.93 (2.95) | 77.0 (3.03) | 81.56 (3.21) |
| FCN-264P140-G /J | 90.2 (3.55) | 70 (2.76) | 87.63 (3.45) | 89.7 (3.53) | 94.26 (3.71) |

260 (H) Series (supports high-speed signals)

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