

# 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

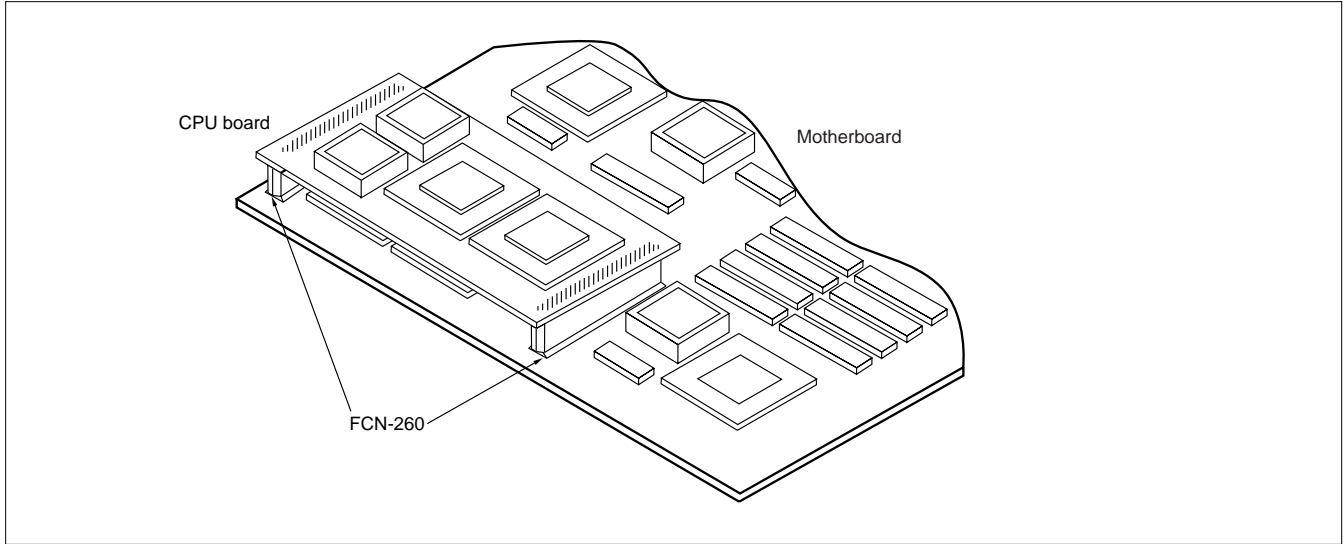
Item	Specification
Operating temperature range	-55° to +105 ° C
Current rating	Signal terminal: 1A Ground terminal: 10A
Voltage rating	250V AC
Contact resistance	Signal terminal: 40mΩ max (6V DC, 0.1 A) Ground terminal: 20mΩ max
Insulation resistance	100MΩ or more (500V DC)
Dielectric withstand voltage	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

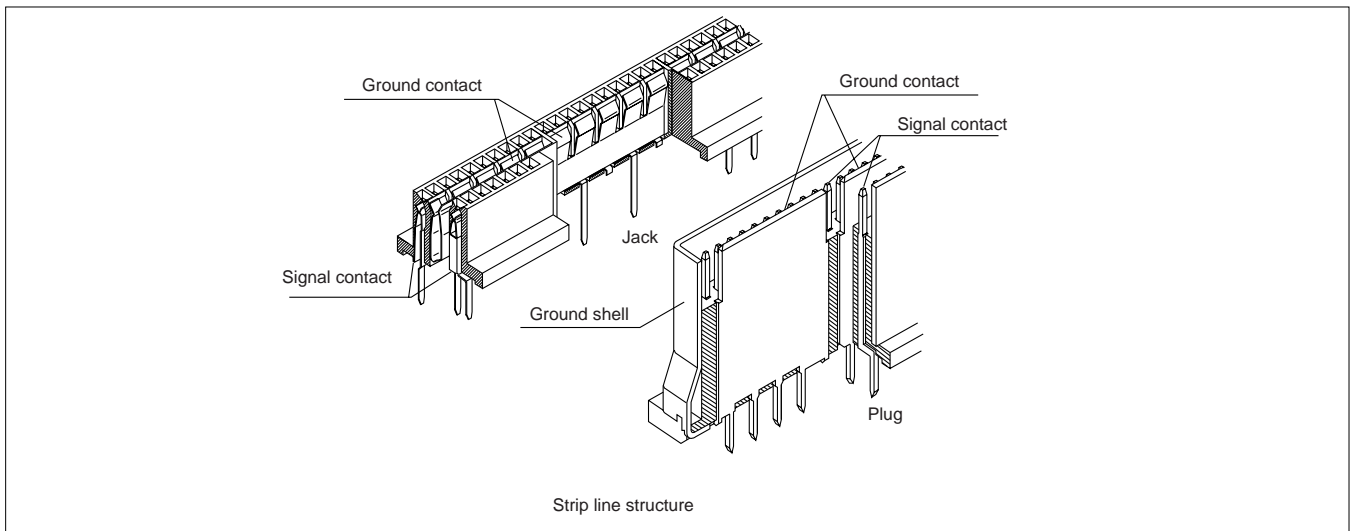
Item	Material
Insulator	LCP
Conductor	Plug: phosphor bronze Socket: gold (PAGOS®)
Plating	Contact: PAGOS® Terminal: palladium

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

## ■ EXAMPLE



## ■ CONNECTOR STRUCTURE

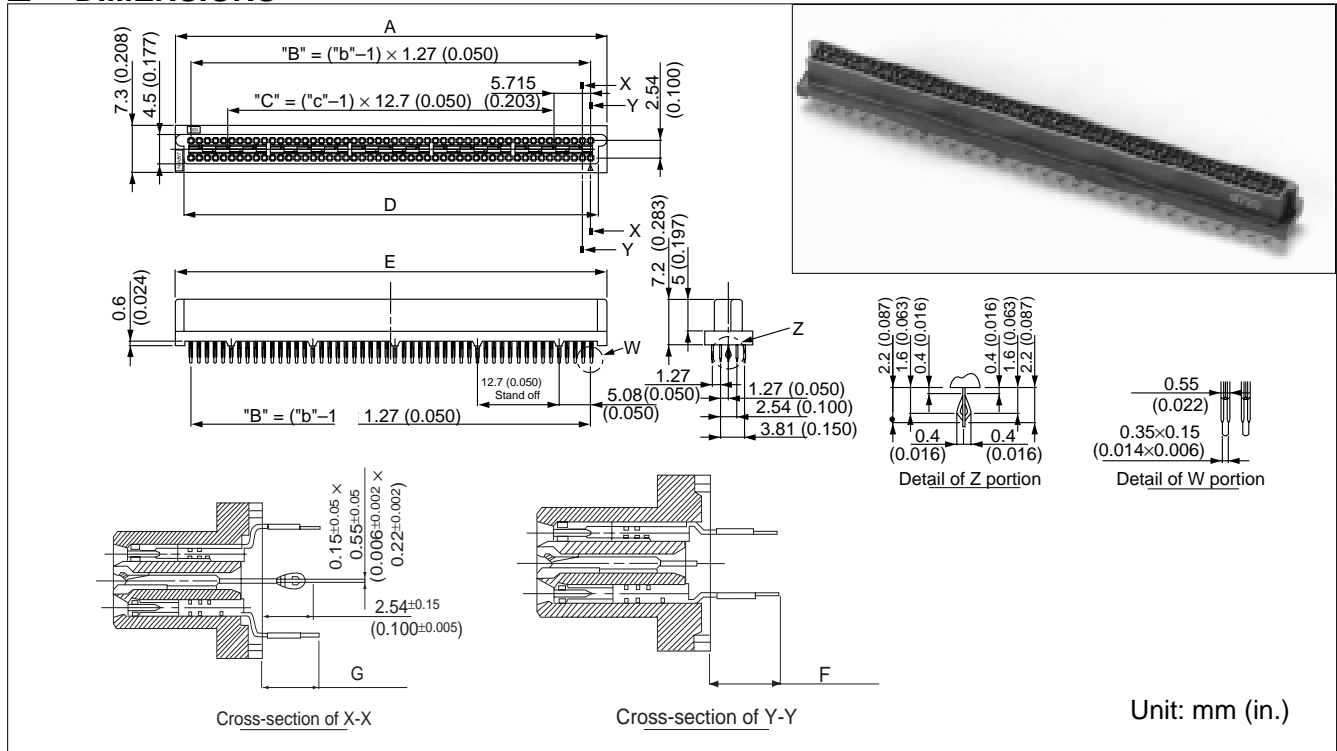


Characteristic	1 to 1	Coaxial	Microstrip	Stripline
Crosstalk	X	⊙	Δ	○
Impedance Matching	X	○	○	○
High Density	○	X	○	○
Shape	<pre> S G S G □ ■ □ ■ G S G S ■ □ ■ □                     </pre>	<pre> G S G S ○ ○ ○ ○ G S G S ○ ○ ○ ○                     </pre>	<pre> S S S S □ □ □ □ G ██████████ S S S S □ □ □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

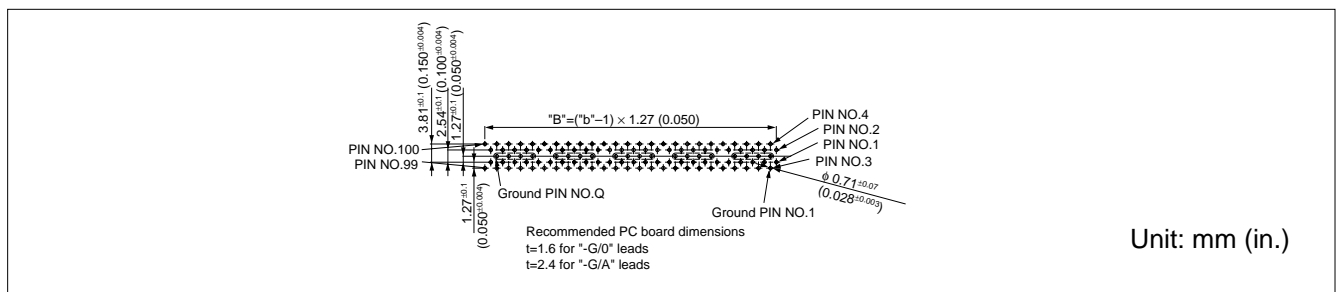
# 260 (H) Series (supports high-speed signals)

## STRAIGHT SOCKET

### DIMENSIONS



### MOUNTING HOLE LAYOUT



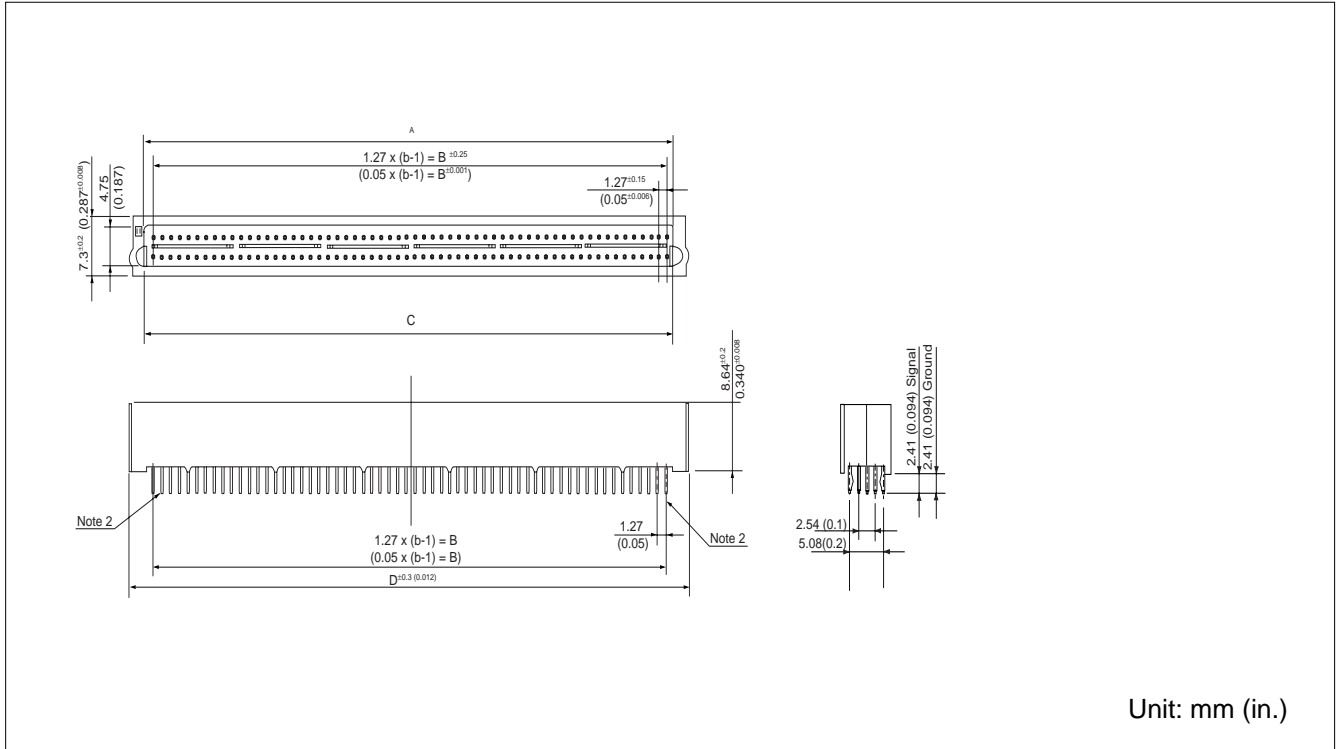
### ORDERING PART NUMBER AND DIMENSIONS

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)

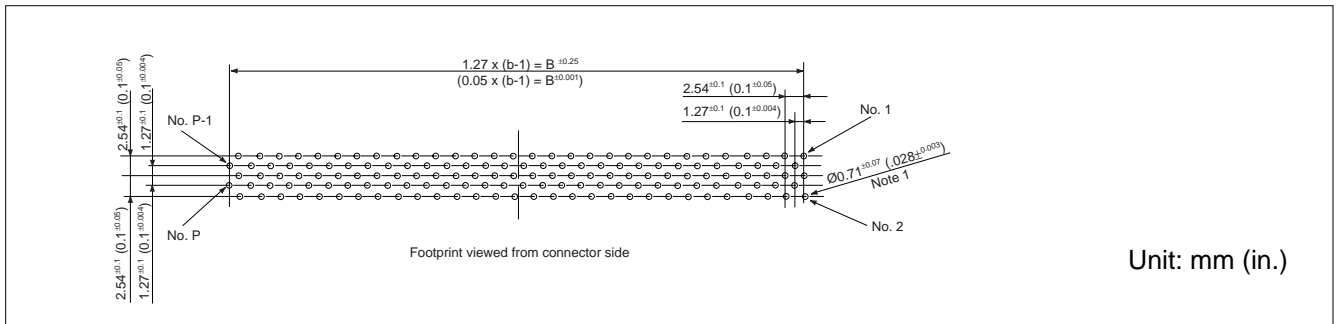
# 260 (H) Series (supports high-speed signals)

## VERTICAL MOUNT / PLUG

### DIMENSIONS



### MOUNTING HOLE LAYOUT



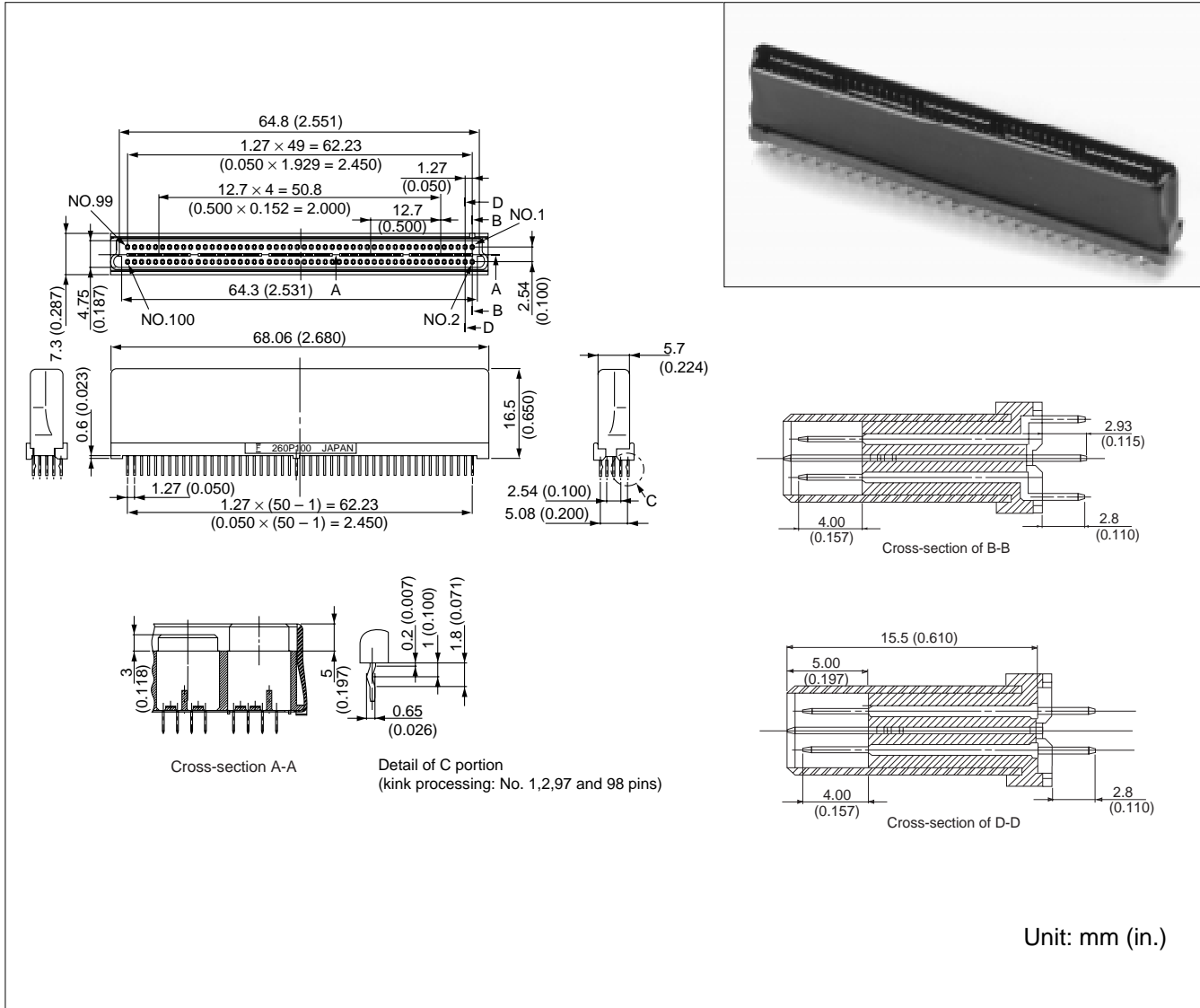
### ORDERING PART NUMBER AND DIMENSIONS

No. of Contacts	Part Number	Dimensions: mm (in.)					Arrangement Note 6
		A	b	B	C	D	
120	FCN-264P120-G/OS	77.5 (3.051)	60 (2.362)	74.93 (1.887)	77.0 (3.031)	81.56 (3.211)	GPGGPG
140	FCN-264P140-G/OS	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/OS	102.9 (4.051)	80 (3.15)	100.33 (3.95)	102.4 (4.017)	106.96 (4.211)	GPGPPGPG
180	FCN-264P180-G/OS	115.6 (4.551)	90 (3.543)	113.03 (4.45)	115.1 (4.531)	119.66 (4.711)	GPGPGPGPG
200	FCN-264P200-G/OS	128.3 (5.051)	100 (3.937)	125.73 (4.95)	127.8 (5.031)	132.36 (5.211)	GPGPGPGPGPG

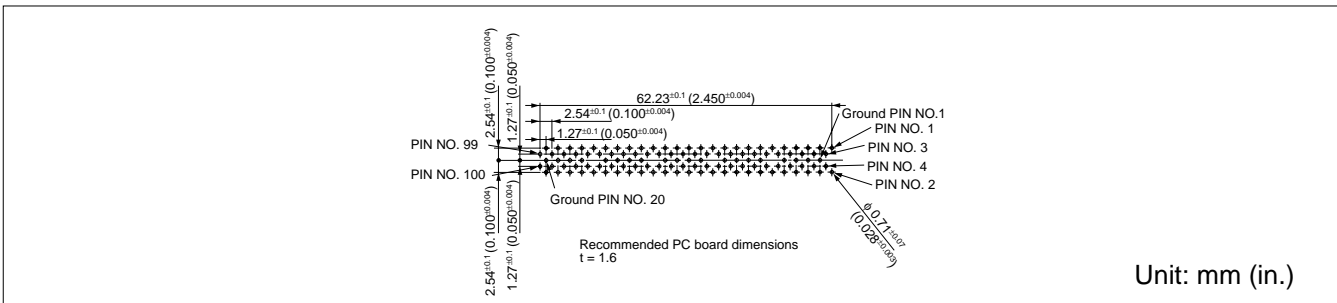
# 260 (H) Series (supports high-speed signals)

## STRAIGHT PLUG

### ■ DIMENSIONS



### ■ MOUNTING HOLE DIMENSIONS



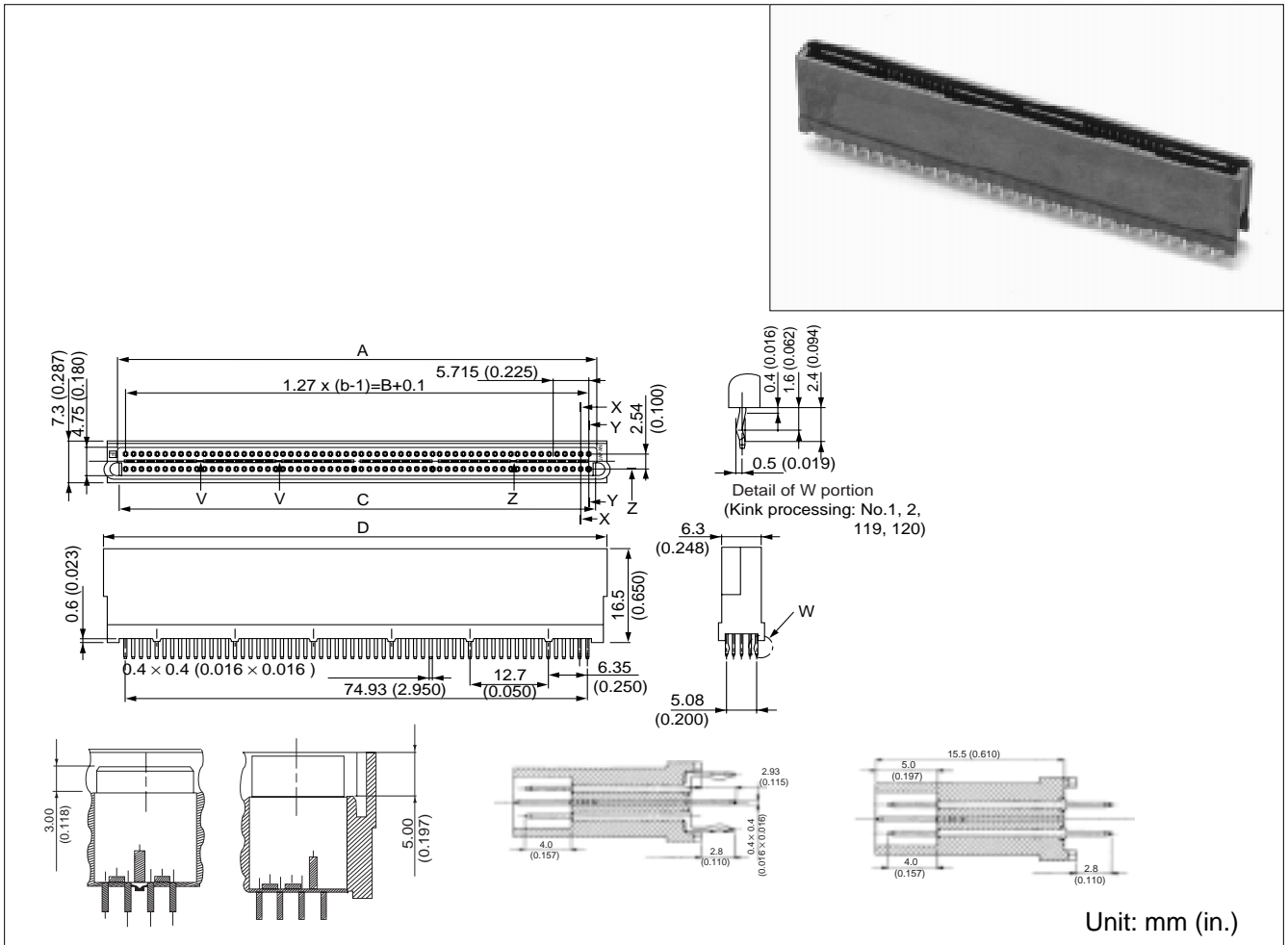
### ■ PART NUMBER

FCN-264P100-G/C

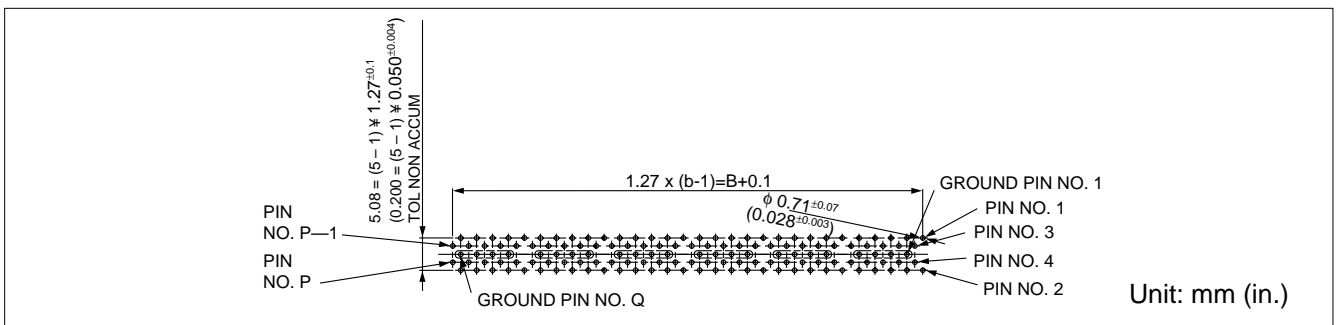
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## STRAIGHT PLUG

### ■ 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)

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