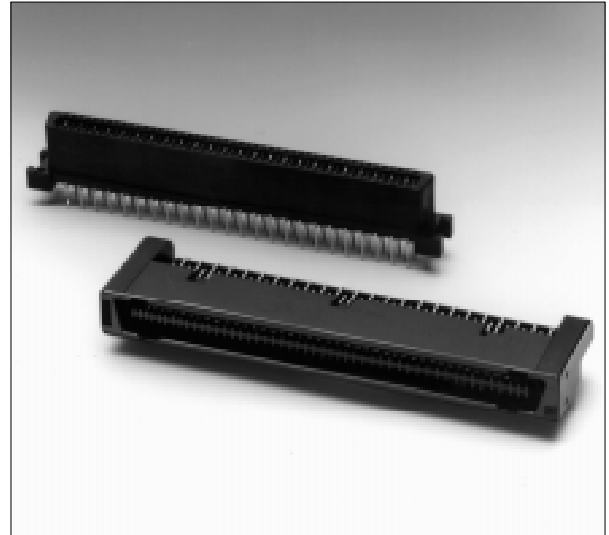


# FOR BOARD-TO-BOARD CONNECTION

## 240 SERIES

### ■ FEATURES

- 1.27 mm (0.05 in.) pitch contact arrangement in two rows enables high-density mounting.
- Connectors with 48 to 256 contacts are available for various purposes. Connectors with board locks are also available.
- Bellows contacts ensure stable contact, preventing pins from bending. The bellows contacts also have excellent stability with repeated insertion and extraction.
- 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.
- Insulation is UL-approved (94V-0) and is washable.
- The series includes a four-row multi-contact type (192/256 contacts), SMT type (68/96 contacts), wide tapered type (straight plug: 96 contacts, right-angle plug: 48/68 contacts).



### ■ SPECIFICATIONS

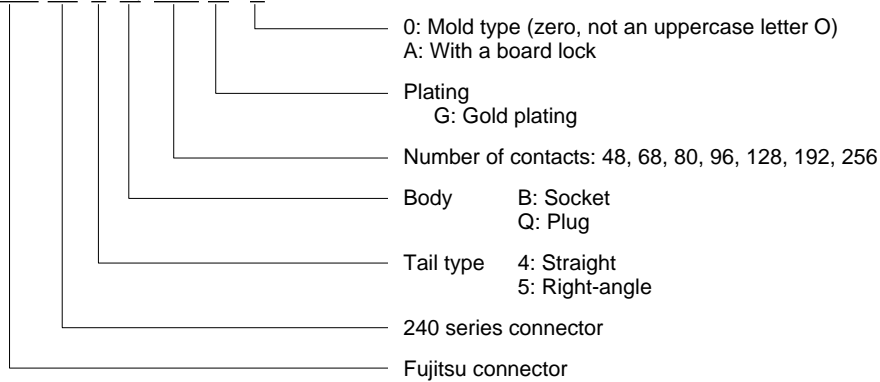
Item	Specifications
Operating temperature range	-55°C to +105°C
Current rating	DC 1 A
Voltage rating	AC 240 V
Contact resistance	35 mΩ max. (DC 6 V, 0.1 V)
Insulation resistance	1000 MΩ min. (DC 500 V)
Dielectric withstand voltage	AC 500 V for 1 minute
Insertion force [kg max.]	Number of contacts
	Force
Withdrawal force [kg min.]	Number of contacts
	Force
Applicable PC board (standard)	1.6 mm (0.063 in.)

### ■ MATERIALS

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

## ORDERING CODE

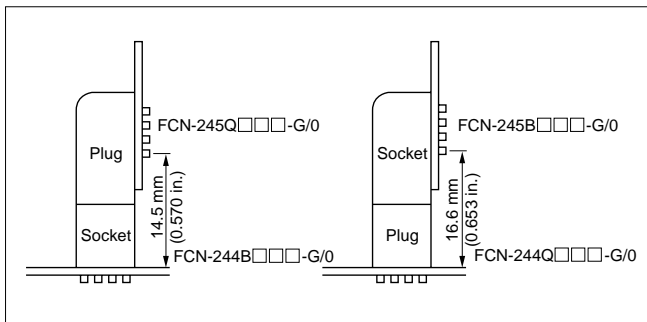
FCN-24 5 Q 048-G / 0



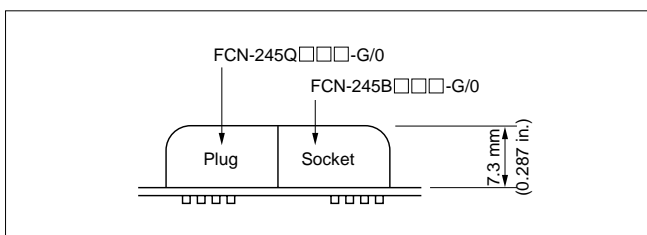
## APPLICATIONS

### Board-to-board connection

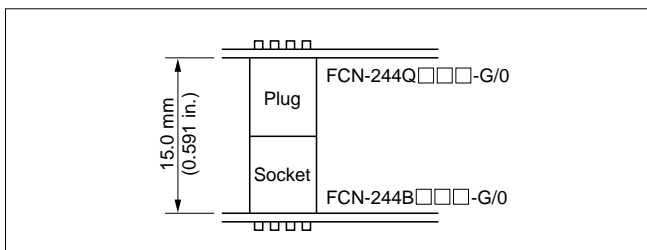
#### Vertical PCB connection



#### Horizontal PCB connection

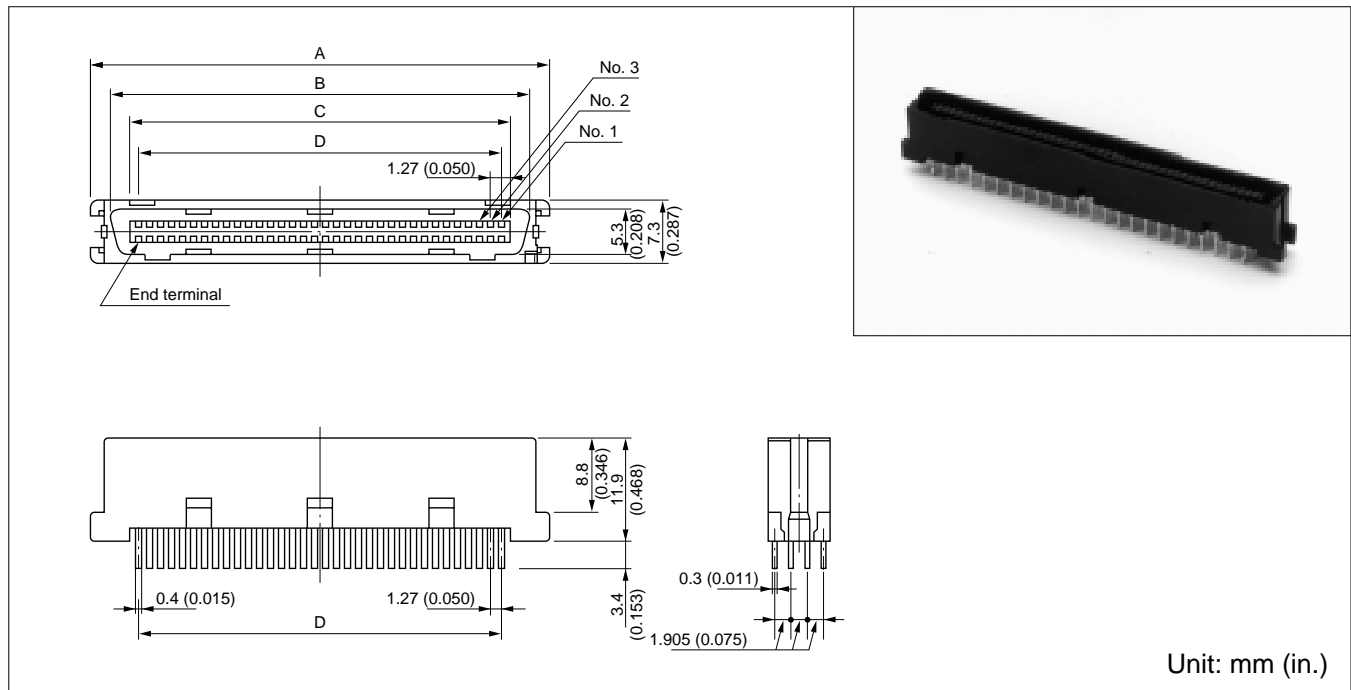


#### Parallel PCB connection

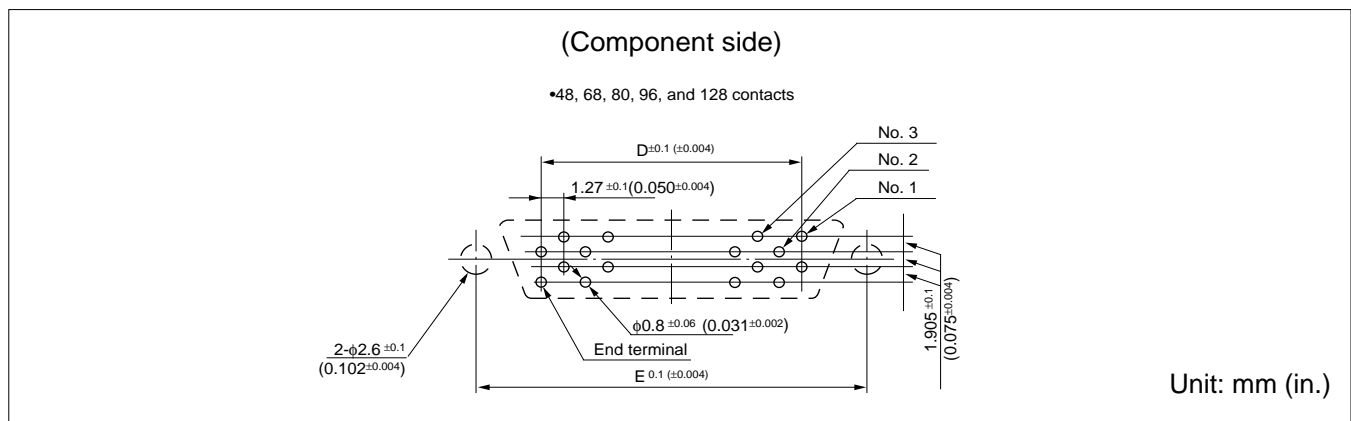


## STRAIGHT PLUG

### ■ DIMENSIONS



### ■ MOUNTING HOLE LAYOUT



Connectors without a board lock do not require the mounting holes of 2-φ2.6 mm (0.102 in.) at both ends.

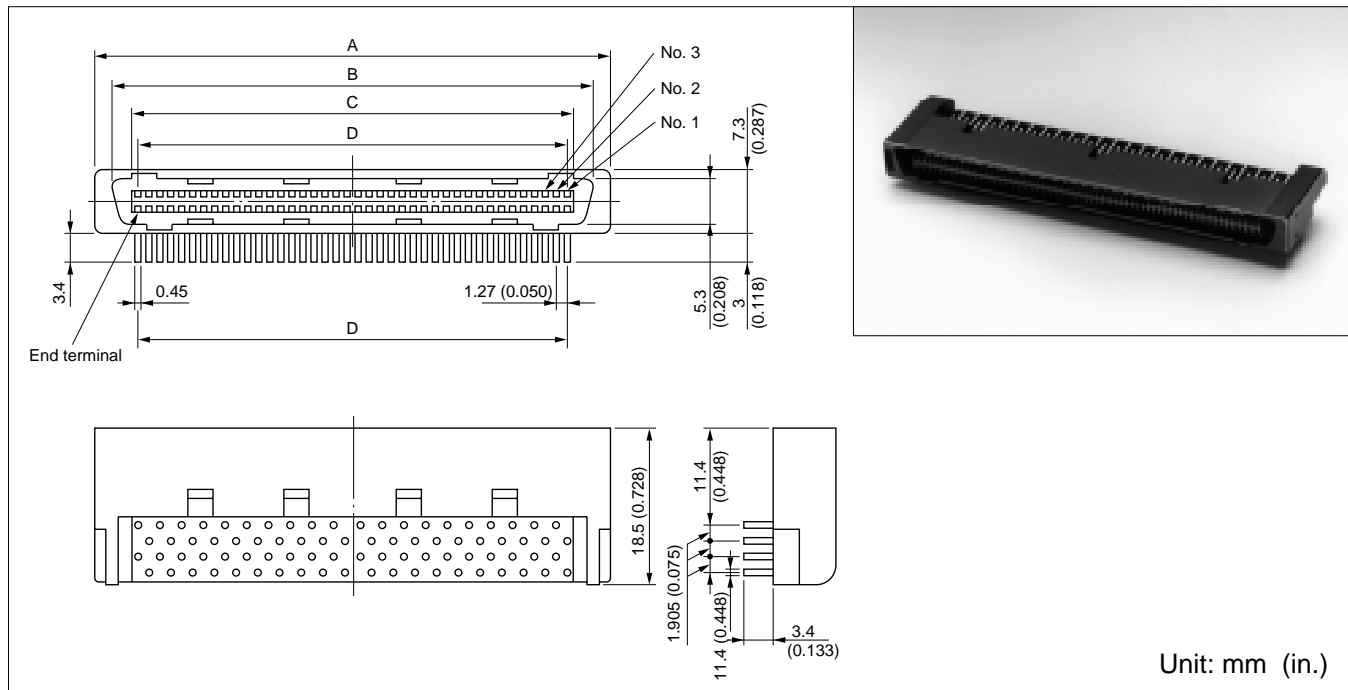
### ■ PART NUMBERS AND DIMENSIONS

Number of contacts	Part number	Dimensions: mm (in.)				
		A	B	C	D	E
48	FCN-244Q048-G/0	40.52 (1.595)	36.22 (1.426)	30.92 (1.217)	29.21 (1.150)	38.10 (1.500)
68	FCN-244Q068-G/0	53.22 (2.095)	48.92 (1.926)	43.62 (1.717)	41.91 (1.650)	50.80 (2.000)
80	FCN-244Q080-G/0	60.84 (2.395)	56.54 (2.226)	51.24 (2.017)	49.53 (1.950)	58.42 (2.300)
96	FCN-244Q096-G/0	71.00 (2.795)	66.70 (2.626)	61.40 (2.417)	59.69 (2.350)	68.58 (2.700)
128	FCN-244Q128-G/0	91.32 (3.595)	87.02 (3.426)	81.72 (3.217)	80.01 (3.150)	88.90 (3.500)

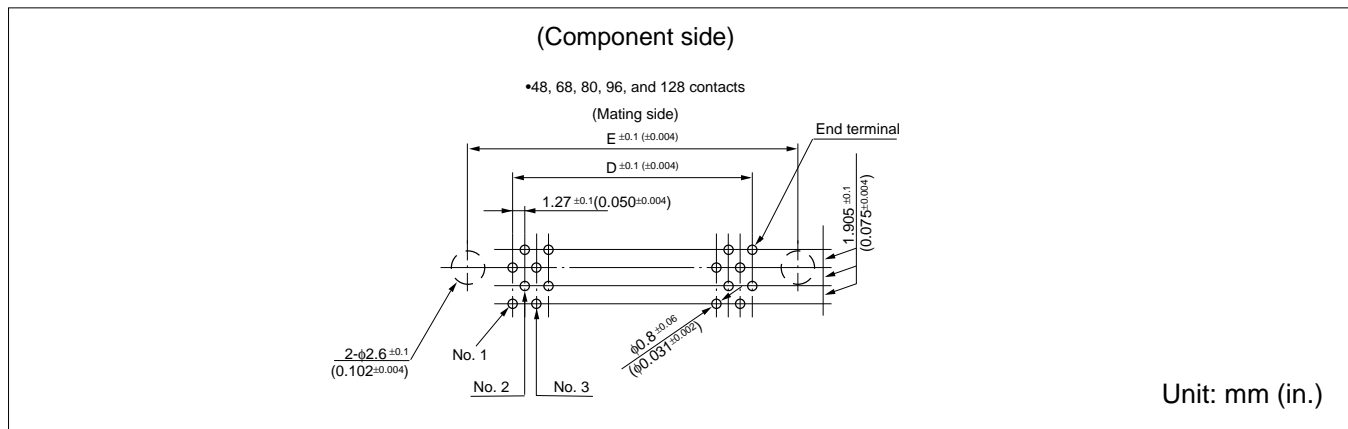
Connectors with board lock brackets are also available. Specify a part number by replacing -G/0 at the end with -G/A.

## RIGHT-ANGLE PLUG

### ■ DIMENSIONS



### ■ MOUNTING HOLE LAYOUT



Connectors without a board lock do not require the mounting holes of 2-φ2.6 mm (0.102 in.) at both ends.

### ■ PART NUMBERS AND DIMENSIONS

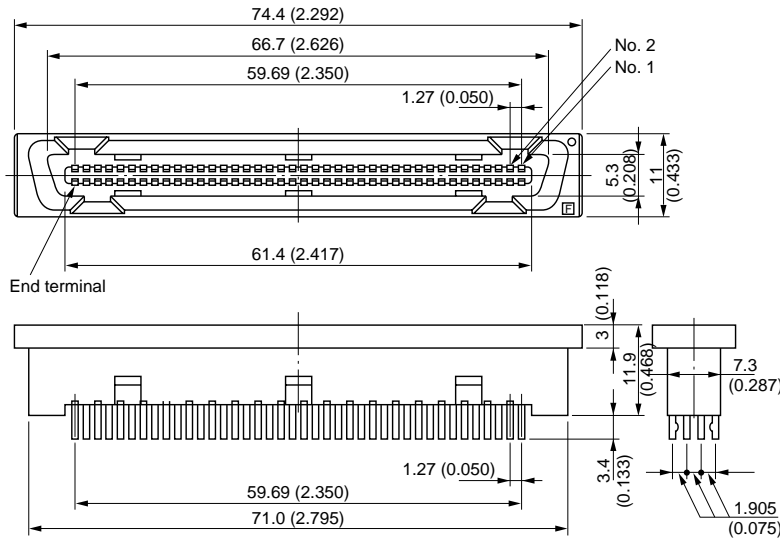
Number of contacts	Part number	Dimensions: mm (in.)				
		A	B	C	D	E
48	FCN-245Q048-G/0	40.52 (1.595)	36.22 (1.426)	30.92 (1.217)	29.21 (1.150)	38.10 (1.500)
68	FCN-245Q068-G/0	53.22 (2.095)	48.92 (1.926)	43.62 (1.717)	41.91 (1.650)	50.80 (2.000)
80	FCN-245Q080-G/0	60.84 (2.395)	56.54 (2.226)	51.24 (2.017)	49.53 (1.950)	58.42 (2.300)
96	FCN-245Q096-G/0	71.00 (2.795)	66.70 (2.626)	61.40 (2.417)	59.69 (2.350)	68.58 (2.700)
128	FCN-245Q128-G/0	91.32 (3.595)	87.02 (3.426)	81.72 (3.217)	80.01 (3.150)	88.90 (3.500)

Connectors with board lock brackets are also available. Specify a part number by replacing -G/0 at the end with -G/A.

## STRAIGHT PLUG (SELF ALIGNING FEATURE)

### ■ DIMENSIONS

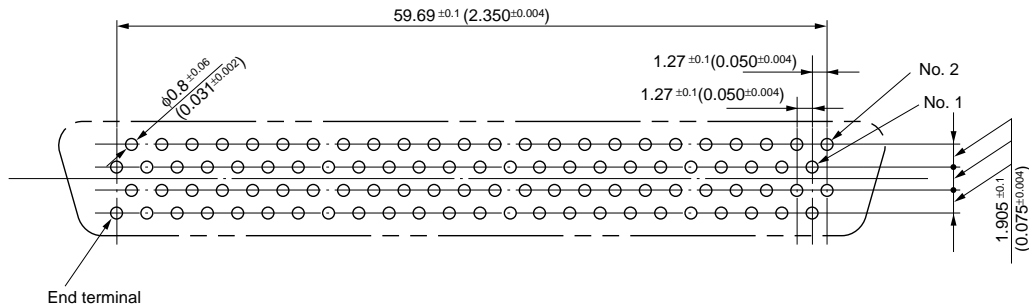
Part number: FCN-244Q096-G/F  
 Number of contacts: 96 contacts



Unit: mm (in.)

### ■ MOUNTING HOLE LAYOUT

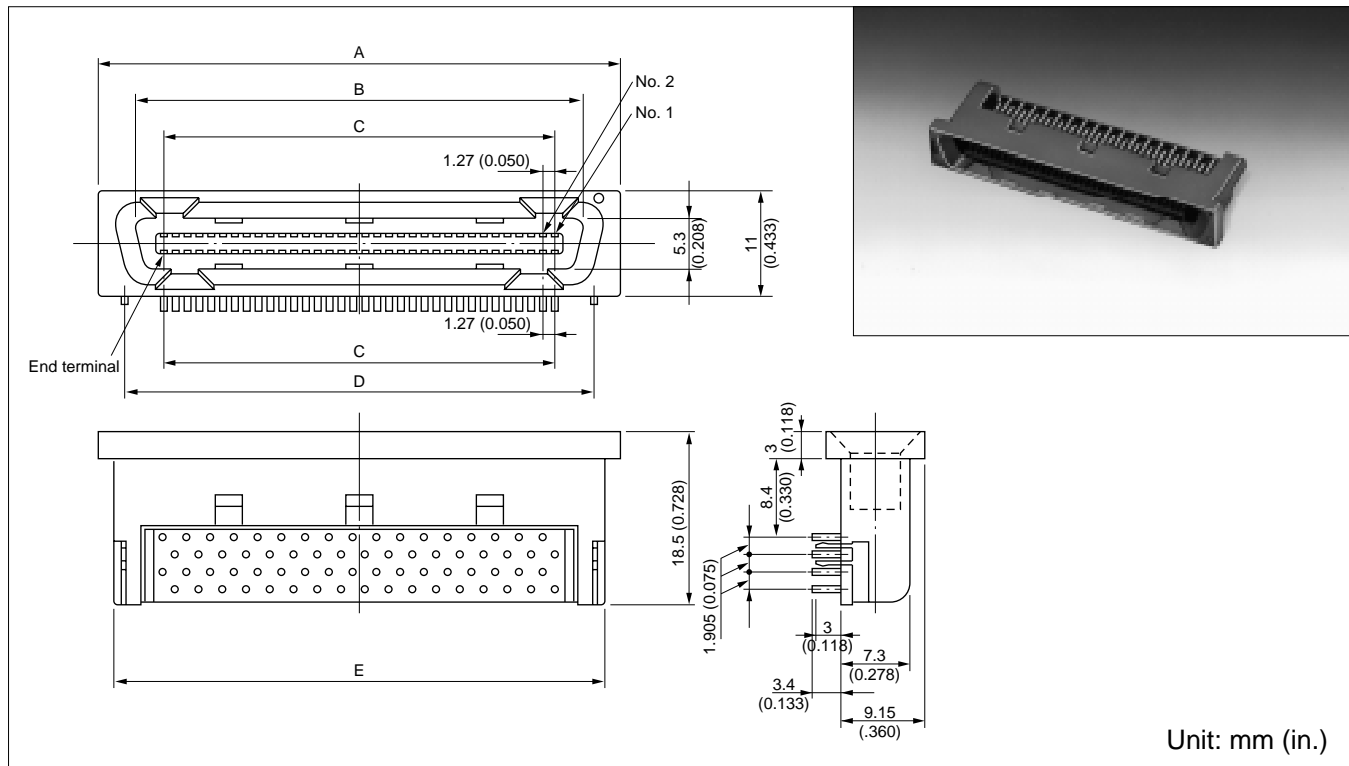
(Component side)



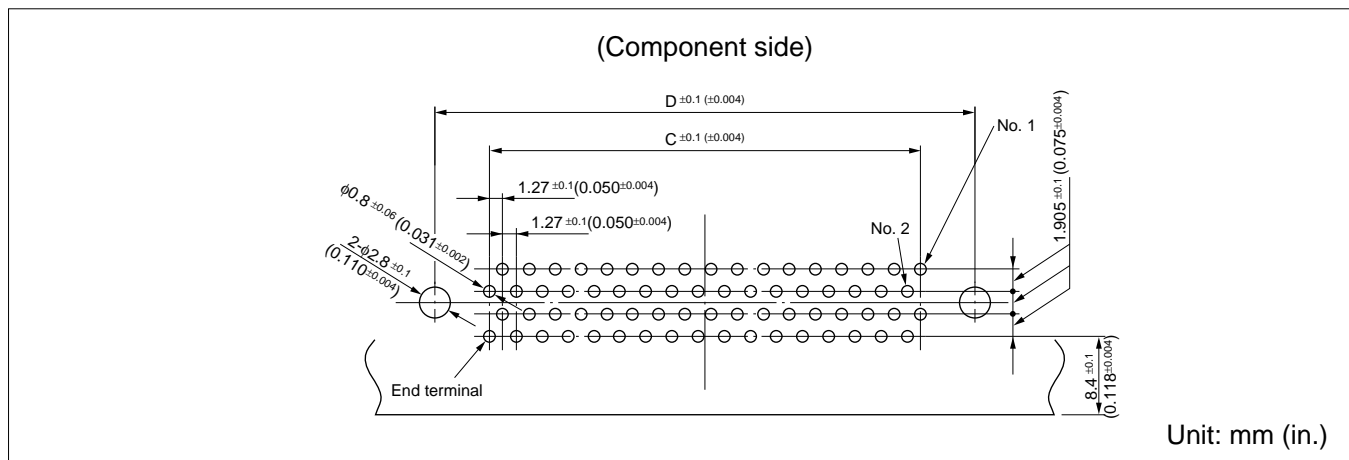
Unit: mm (in.)

## RIGHT-ANGLE PLUG (SELF ALIGNING FEATURE)

### ■ DIMENSIONS



### ■ MOUNTING HOLE LAYOUT

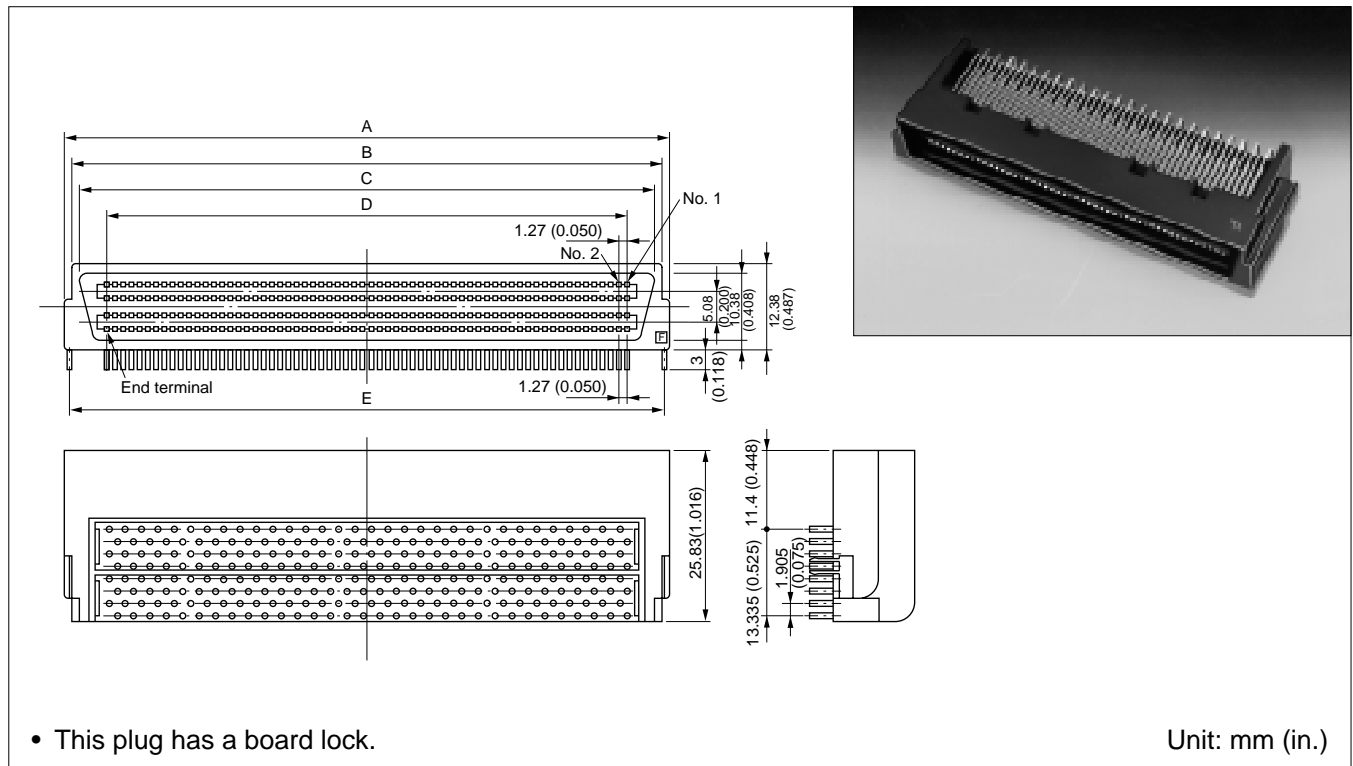


### ■ PART NUMBERS AND DIMENSIONS

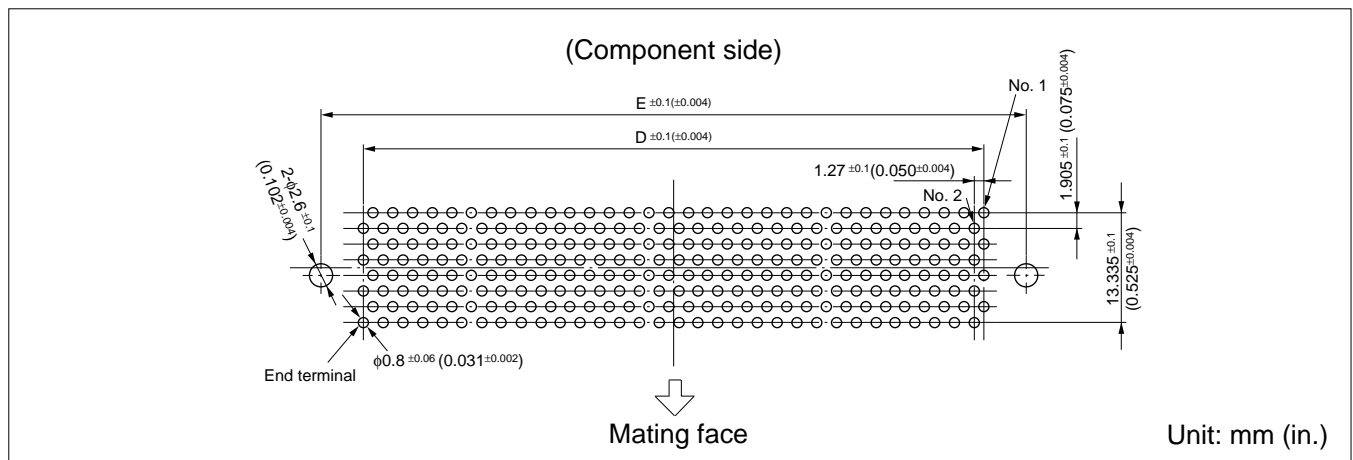
Number of contacts	Part number	Dimensions: mm (in.)				
		A	B	C	D	E
48	FCN-245Q048-G/F	43.92 (1.729)	36.22 (1.426)	29.21 (1.150)	38.10 (1.500)	40.52 (1.595)
68	FCN-245Q068-G/F	56.62 (2.229)	48.92 (1.926)	41.91 (1.650)	50.80 (2.000)	53.22 (2.095)

## RIGHT-ANGLE PLUG (4-ROW TYPE)

### ■ DIMENSIONS



### ■ MOUNTING HOLE LAYOUT

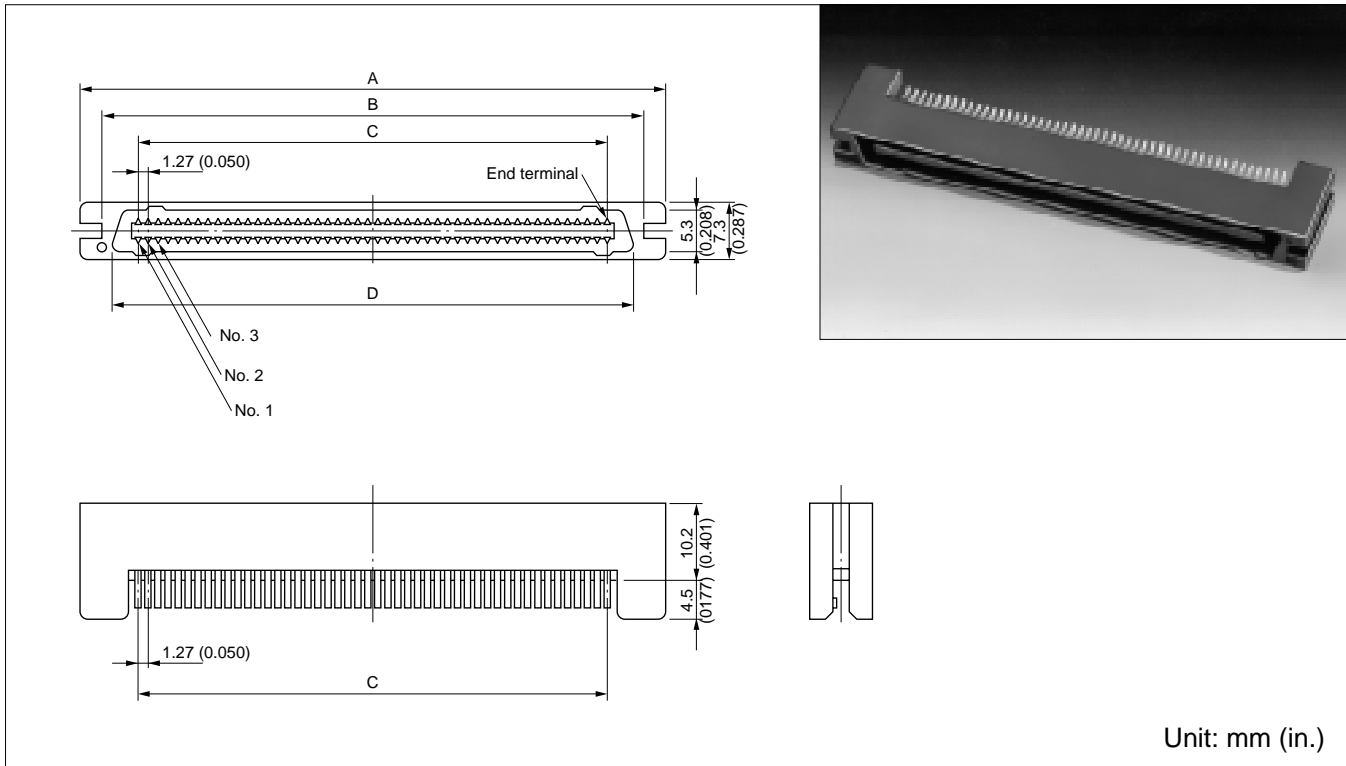


### ■ PART NUMBERS AND DIMENSIONS

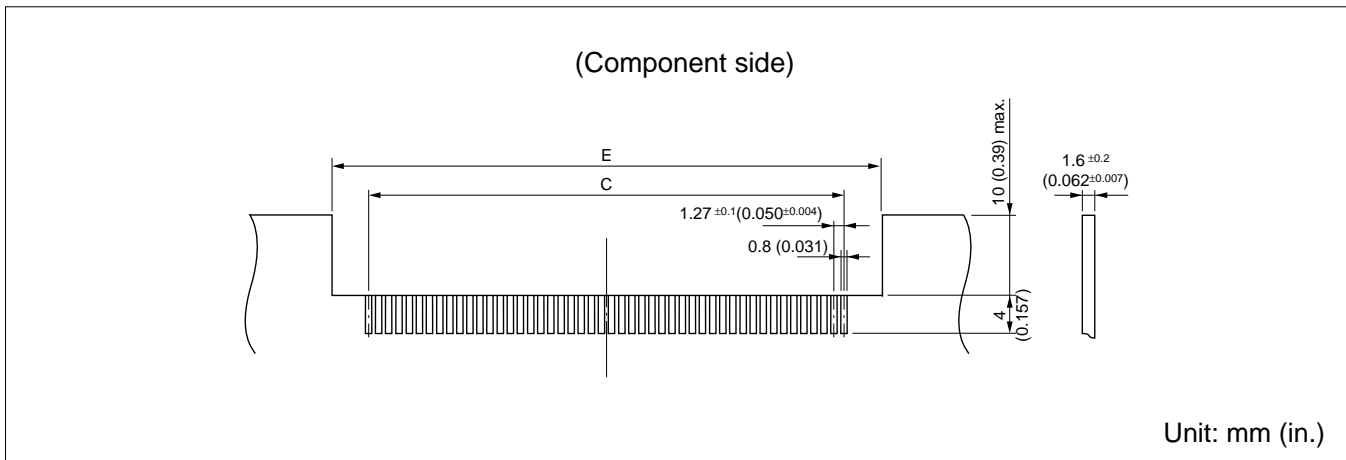
Number of contacts	Part number	Dimensions: mm (in.)				
		A	B	C	D	E
192	FCN-245Q192-G/G	73.42 (2.891)	70.47 (2.774)	68.62 (2.702)	59.69 (2.350)	71.00 (2.795)
256	FCN-245Q256-G/G	93.74 (3.691)	90.79 (3.574)	88.94 (3.502)	80.01 (3.150)	91.32 (3.595)

## SMT PLUG (STRADDLE MOUNT)

### ■ DIMENSIONS



### ■ PC BOARD PATTERN



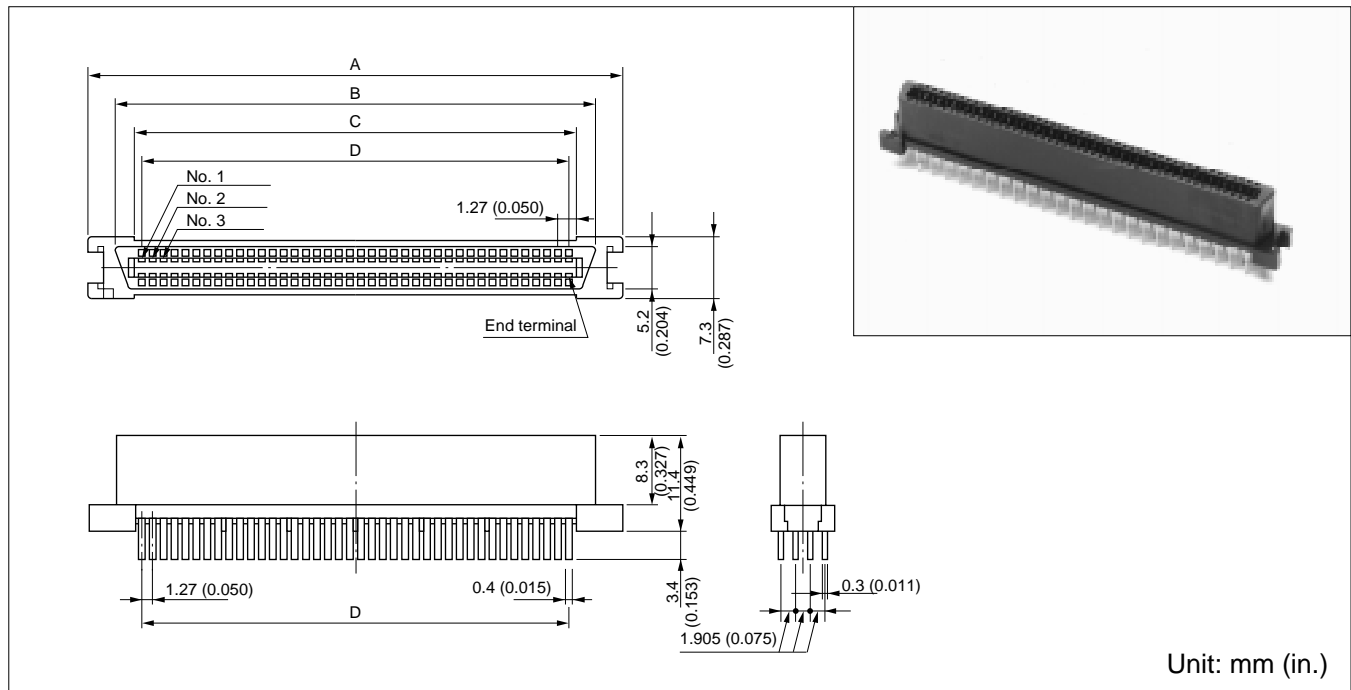
### ■ PART NUMBERS AND DIMENSIONS

Number of contacts	Part number	Dimensions: mm (in.)				
		A	B	C	D	E
68	C630-5338-T434	56.82 (2.237)	50.82 (2.001)	41.91 (1.650)	48.62 (1.9141)	51.22 (2.017)
96	C630-5338-T448	71.60 (2.819)	68.60 (2.701)	59.69 (2.350)	66.40 (2.614)	68.80 (2.709)

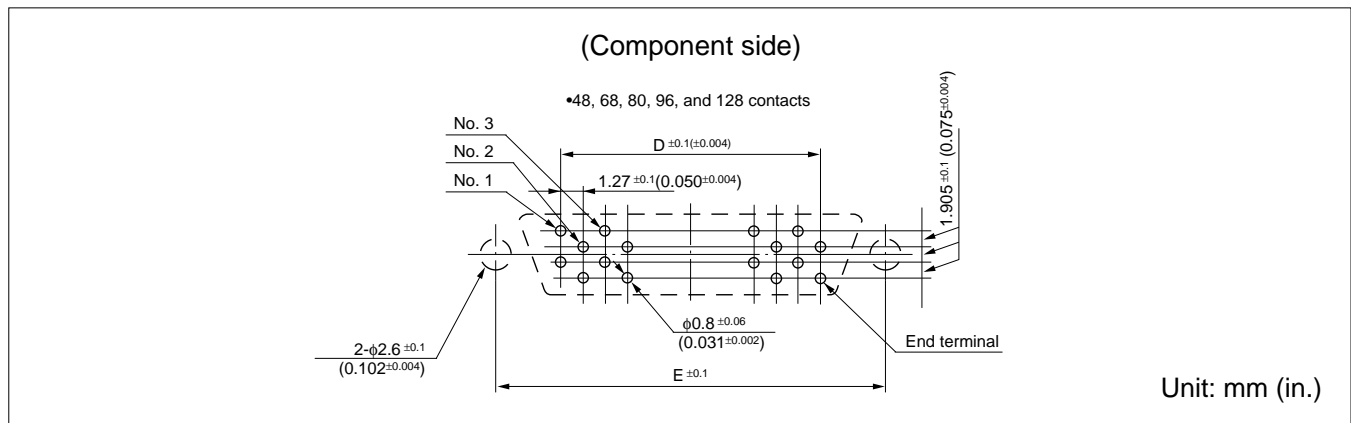


## STRAIGHT SOCKET

### ■ DIMENSIONS



### ■ MOUNTING HOLE LAYOUT



Connectors without a board lock do not require the mounting holes of  $2-\phi 2.6$  mm (0.102 in.) at both ends.

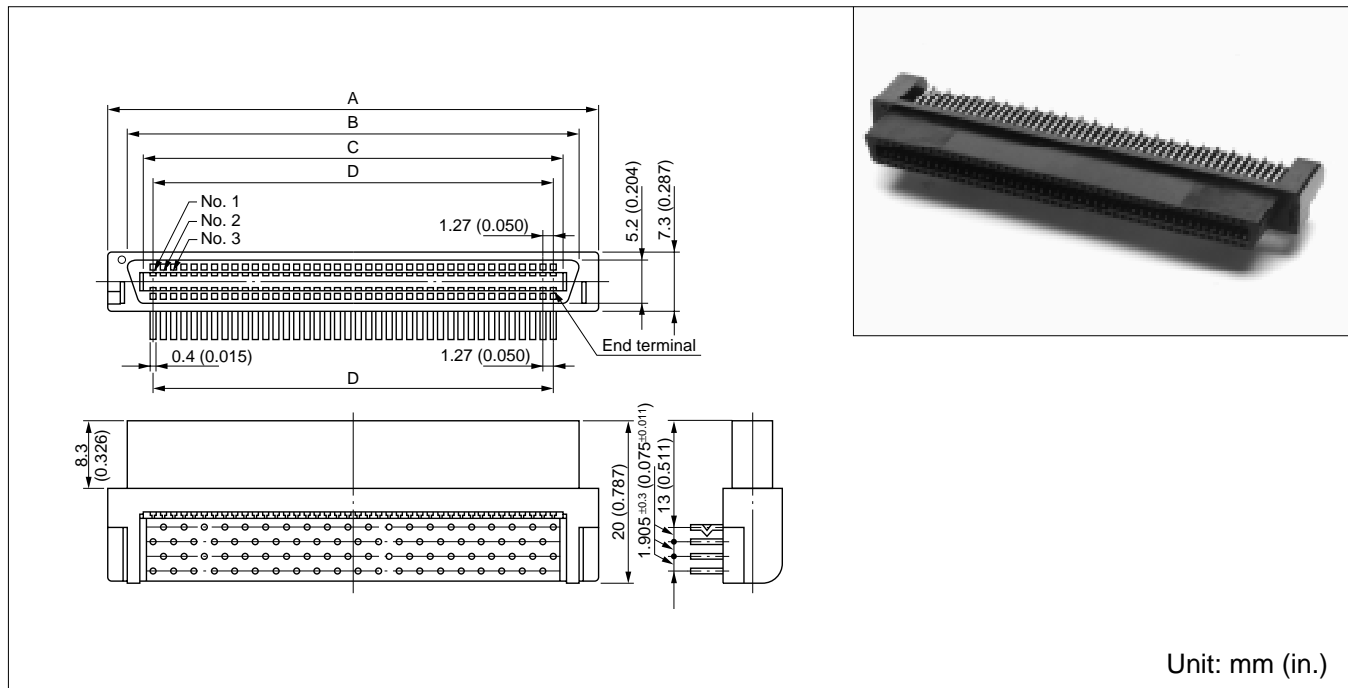
### ■ PART NUMBERS AND DIMENSIONS

Number of contacts	Part number	Dimensions: mm (in.)			
		A	B	C	D
48	FCN-244B048-G/0	40.52 (1.595)	36.22 (1.426)	31.12 (1.225)	29.21 (1.150)
68	FCN-244B068-G/0	53.22 (2.095)	48.92 (1.926)	43.82 (1.725)	41.91 (1.650)
80	FCN-244B080-G/0	60.84 (2.395)	56.54 (2.226)	51.44 (2.025)	49.53 (1.950)
96	FCN-244B096-G/0	71.00 (2.795)	66.70 (2.626)	61.60 (2.425)	59.69 (2.350)
128	FCN-244B128-G/0	91.32 (3.595)	87.02 (3.426)	81.92 (3.225)	80.01 (3.150)

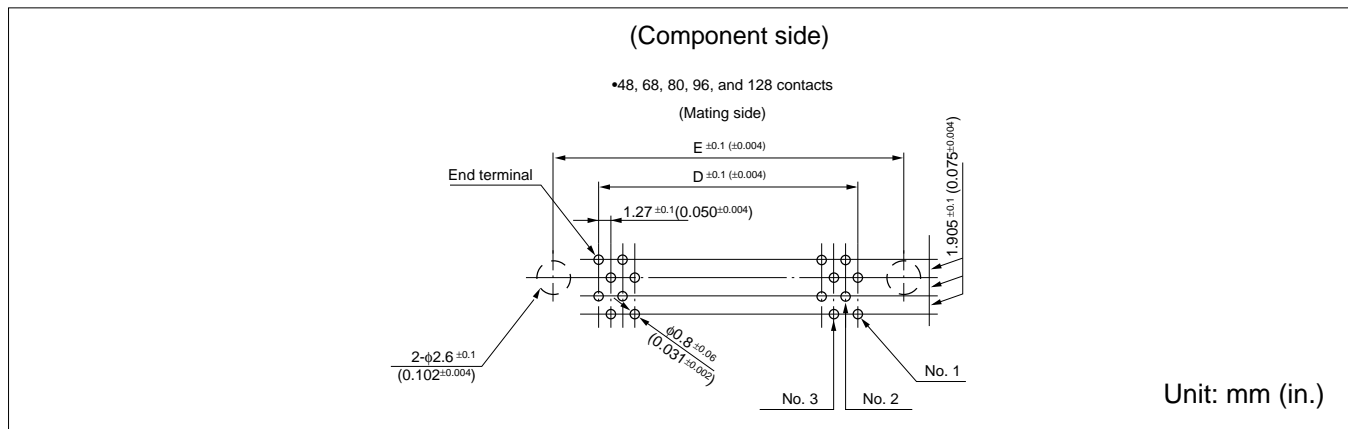
Connectors with board lock brackets are also available. Specify a part number by replacing -G/0 at the end with -G/A.

## RIGHT-ANGLE SOCKET

### ■ DIMENSIONS



### ■ MOUNTING HOLE LAYOUT



Connectors without a board lock do not require the mounting holes of 2- $\phi 2.6$  mm (0.102 in.) at both ends.

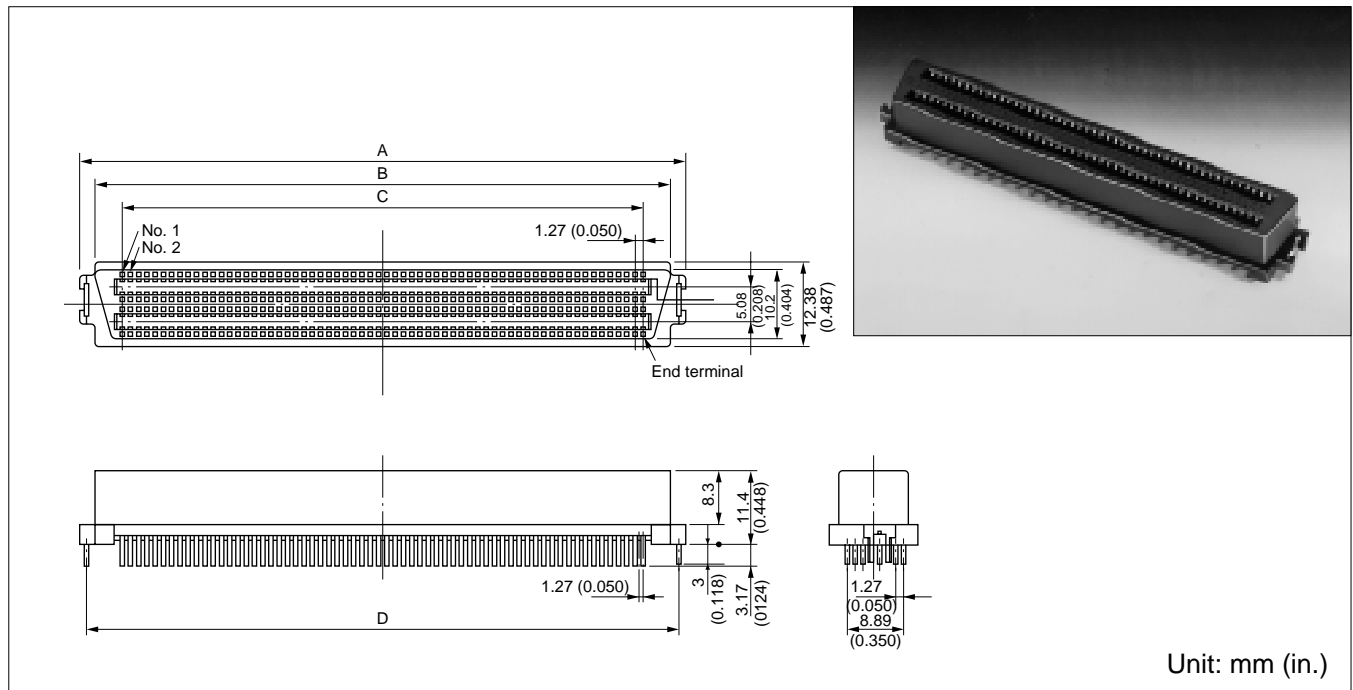
### ■ PART NUMBERS AND DIMENSIONS

Number of contacts	Part number	Dimensions: mm (in.)				
		A	B	C	D	E
48	FCN-245B048-G/0	40.52 (1.595)	36.22 (1.426)	31.12 (1.225)	29.21 (1.150)	38.10
68	FCN-245B068-G/0	53.22 (2.095)	48.92 (1.926)	43.82 (1.725)	41.91 (1.650)	50.80
80	FCN-245B080-G/0	60.84 (2.395)	56.54 (2.226)	51.44 (2.025)	49.53 (1.950)	58.42
96	FCN-245B096-G/0	71.00 (2.795)	66.70 (2.626)	61.60 (2.425)	59.69 (2.350)	68.58
128	FCN-245B128-G/0	91.32 (3.595)	87.02 (3.426)	81.92 (3.225)	80.01 (3.150)	88.90

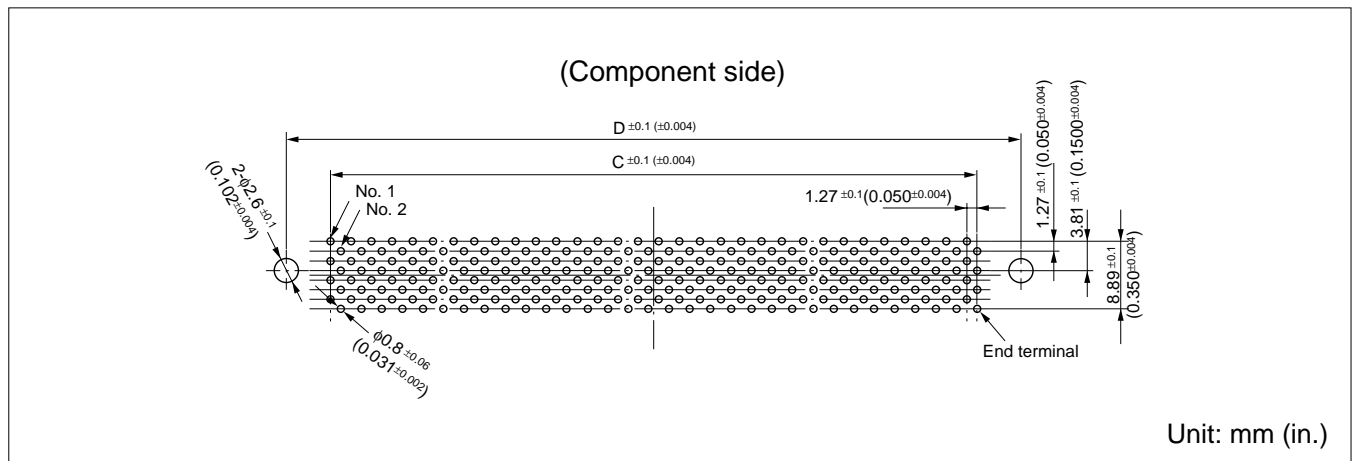
Connectors with board lock brackets are also available. Specify a part number by replacing -G/0 at the end with -G/A.

## STRAIGHT SOCKET (4-ROW TYPE)

### ■ DIMENSIONS



### ■ MOUNTING HOLE LAYOUT

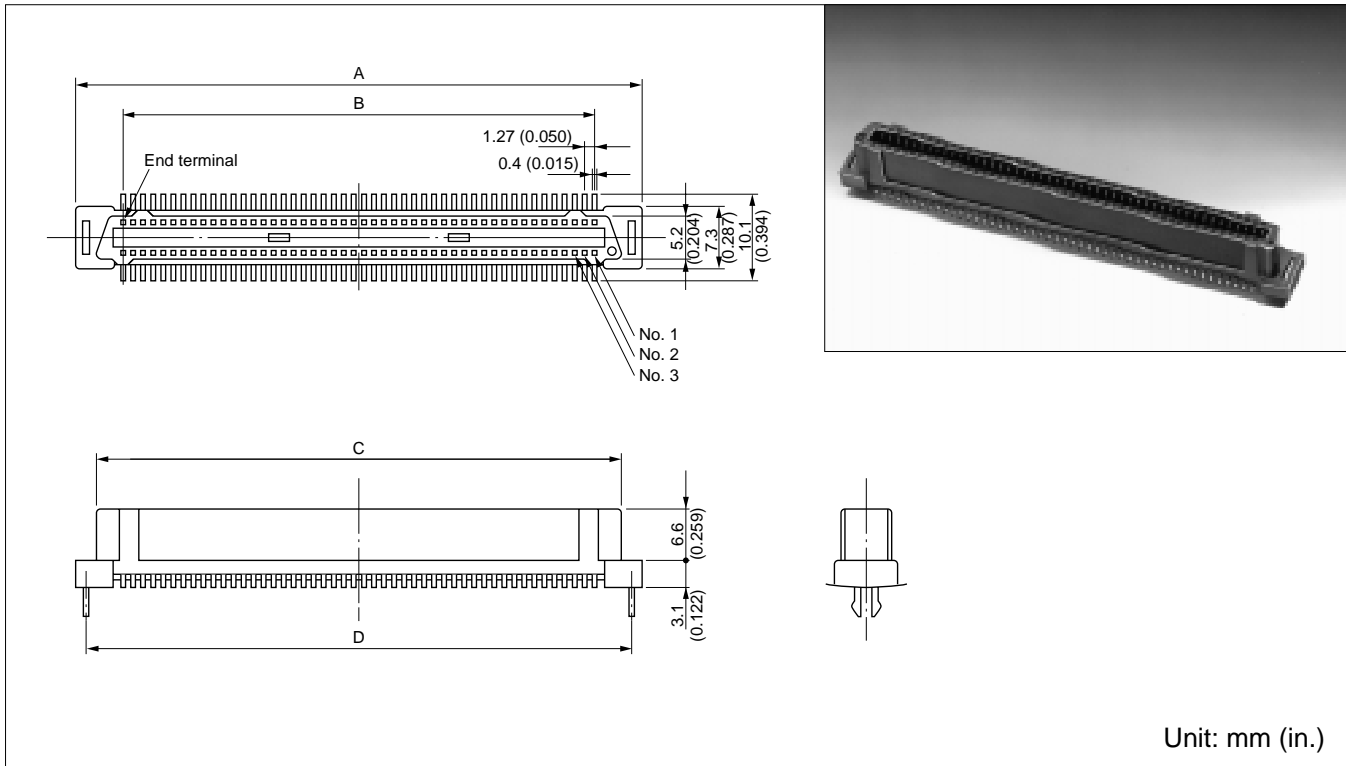


### ■ PART NUMBERS AND DIMENSIONS

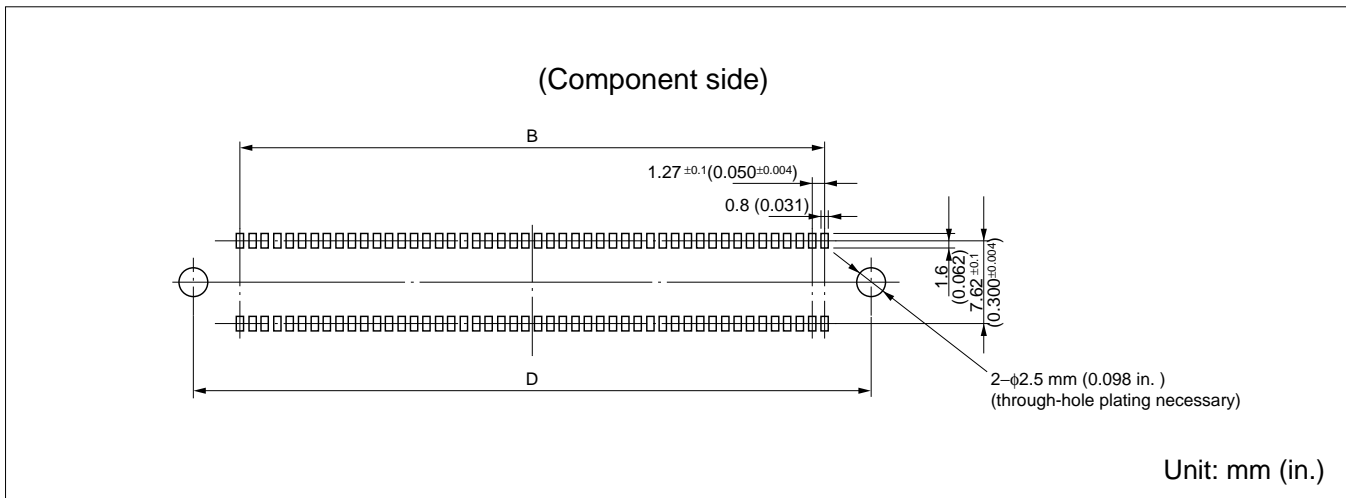
Number of contacts	Part number	Dimensions: mm (in.)			
		A	B	C	D
192	FCN-244B192-G/G	73.42 (2.890)	68.42 (2.693)	59.69 (2.350)	71.00 (2.795)
256	FCN-244B256-G/G	93.74 (3.690)	88.74 (3.493)	80.01 (3.150)	91.32 (3.595)

## SMT SOCKET (1)

### ■ DIMENSIONS



### ■ PC BOARD PATTERN

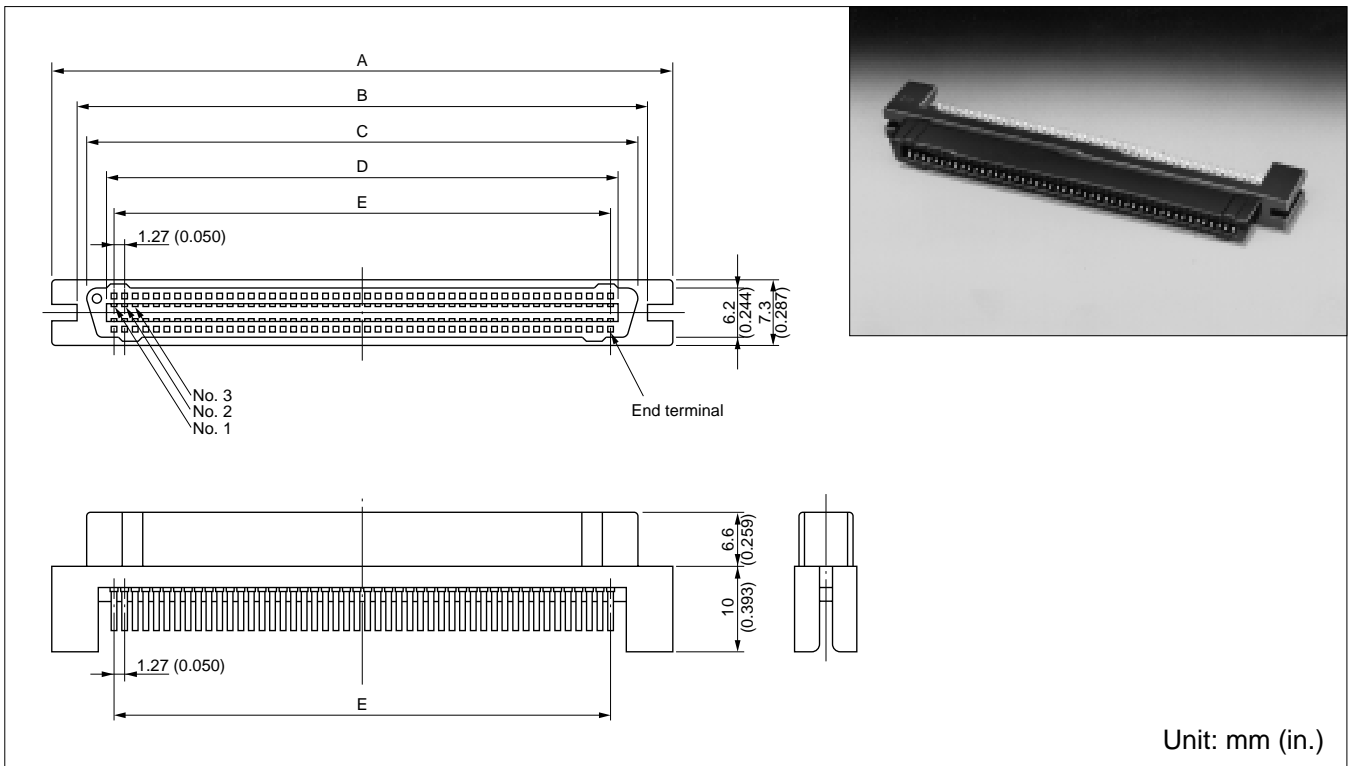


### ■ PART NUMBERS AND DIMENSIONS

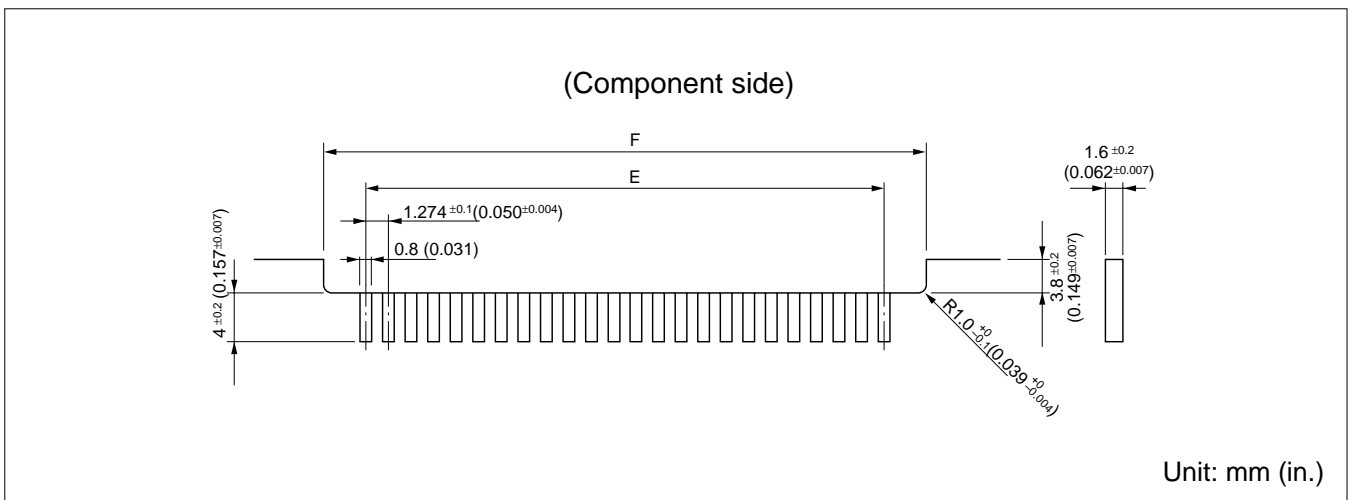
Number of contacts	Part number	Dimensions: mm (in.)			
		A	B	C	D
68	C630-5337-T434	53.22 (2.095)	41.91 (1.650)	48.42 (1.906)	50.80 (2.000)
96	C630-5337-T448	71.00 (2.795)	59.69 (2.350)	66.20 (2.606)	68.58 (2.700)

## SMT SOCKET (2) (STRADDLE MOUNT)

### ■ DIMENSIONS



### ■ PC BOARD PATTERN



### ■ PART NUMBERS AND DIMENSIONS

Number of contacts	Part number	Dimensions: mm (in.)					
		A	B	C	D	E	F
96	C630-5337-T548	74.60 (2.957)	68.60 (2.700)	66.20 (2.606)	61.60 (2.4250)	59.69 (2.350)	69.00 (2.716)

## Fujitsu Components International Headquarter Offices

### Japan

Fujitsu Component Limited  
Gotanda-Chuo Building  
3-5, Higashigotanda 2-chome, Shinagawa-ku  
Tokyo 141-0022, Japan  
Tel: (81-3) 5449-7010  
Fax: (81-3) 5449-2626  
Email: [promothq@fcl.fujitsu.com](mailto:promothq@fcl.fujitsu.com)  
Web: [www.fcl.fujitsu.com](http://www.fcl.fujitsu.com)

### North and South America

Fujitsu Components America, Inc.  
250 E. Caribbean Drive  
Sunnyvale, CA 94089 U.S.A.  
Tel: (1-408) 745-4900  
Fax: (1-408) 745-4970  
Email: [components@us.fujitsu.com](mailto:components@us.fujitsu.com)  
Web: <http://us.fujitsu.com/components>

### Europe

Fujitsu Components Europe B.V.  
Diamantlaan 25  
2132 WV Hoofddorp  
Netherlands  
Tel: (31-23) 5560910  
Fax: (31-23) 5560950  
Email: [info@fceu.fujitsu.com](mailto:info@fceu.fujitsu.com)  
Web: [emea.fujitsu.com/components](http://emea.fujitsu.com/components)

### Asia Pacific

Fujitsu Components Asia Ltd.  
102E Pasir Panjang Road  
#01-01 Citilink Warehouse Complex  
Singapore 118529  
Tel: (65) 6375-8560  
Fax: (65) 6273-3021  
Email: [fcal@fcal.fujitsu.com](mailto:fcal@fcal.fujitsu.com)  
[www.fcal.fujitsu.com](http://www.fcal.fujitsu.com)

© 2007 Fujitsu Components America, Inc. All rights reserved. All trademarks or registered trademarks are the property of their respective owners. Fujitsu Components America, Inc. or its affiliates do not warrant that the content of the datasheet is error free. In a continuing effort to improve our products, Fujitsu Components America, Inc. or its affiliates reserve the right to change specifications/datasheets without prior notice. Rev. November 2, 2007.