

# FCN-244D\*\*\*-G/E, -245D\*\*\*-G/\*, -247R\*\*\*-G/E FCN-240R SERIES BOARD TO CABLE CONNECTORS

## 1.27 mm PITCH, RIBBON CONTACT CONNECTORS FOR BOARD-SOCKET TO ROUND-CABLE-PLUG

### FEATURES

- The mating contact has a 1.27 mm (0.050 in.) pitch. External connection type with high density mounting.
- Ribbon contact provides excellent torsional strength.
- IDC assembly with discrete wire.
- Dual cover (plastic outercover & metal innercover) provides perfect EMI, ESD protection.
- PCB-terminal has a four-row zigzag array (2.54 x 1.905 mm (0.100 x 0.075 in.)).

### SPECIFICATIONS

Operating Temperature Range	-55 to + 85 °C
Maximum Allowable Current	1 A DC
Maximum Allowable Voltage	240 V AC
Contact Resistance	45 mΩ or less (20 mV DC, 10 mA)
Insulation Resistance	1000 MΩ or more (500 V DC)
Dielectric Strength	750 V AC, for one minute
Applicable Wire	AWG#28, 30 (stranded wire) (wire diameter: φ0.5 to 0.65 mm <0.020 to 0.026 in.>)

### MATERIALS

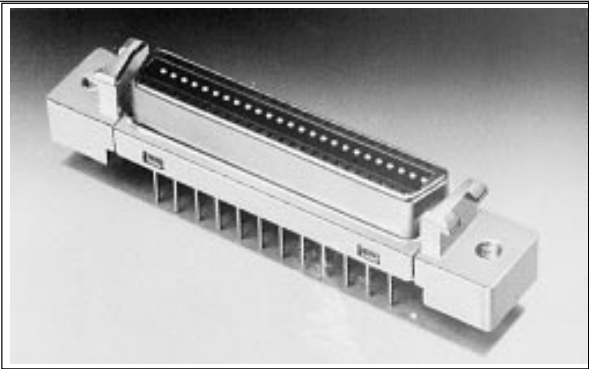
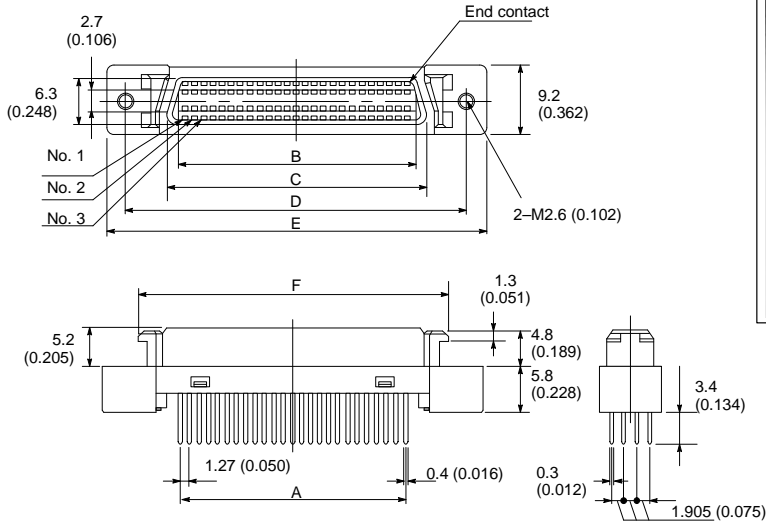
Conductor	Copper alloy
Insulator	Polyester (UL94V-0)
Contact Plating	Gold



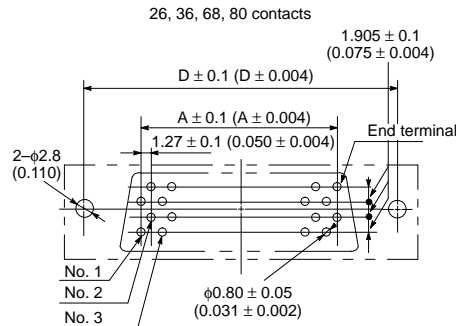
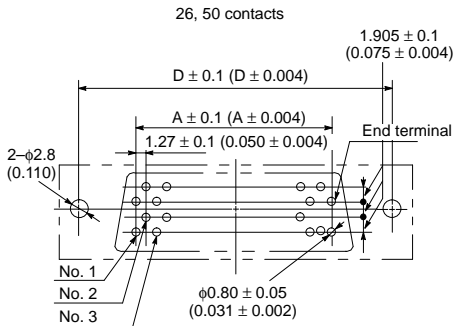
FCN-244D\*\*\*-G/E  
FCN-245D\*\*\*-G/\*  
FCN-247R\*\*\*-G/E

FCN-244D\*\*\*-G/E STRAIGHT TYPE, BOARD-SOCKET

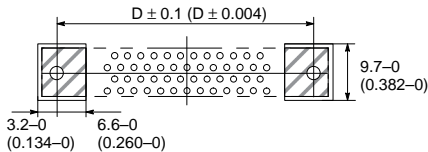
DIMENSIONS



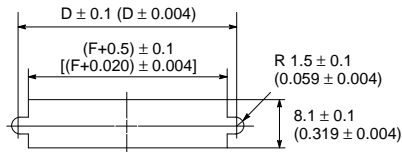
MOUNTING HOLE LAYOUT (FROM MOUNT SIDE)



PROHIBITED PATTERN AREA



RECOMMENDED PANEL LAYOUT



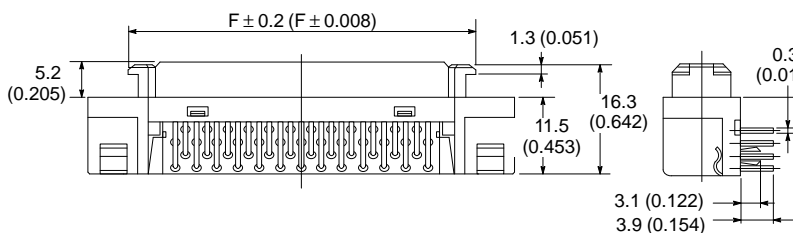
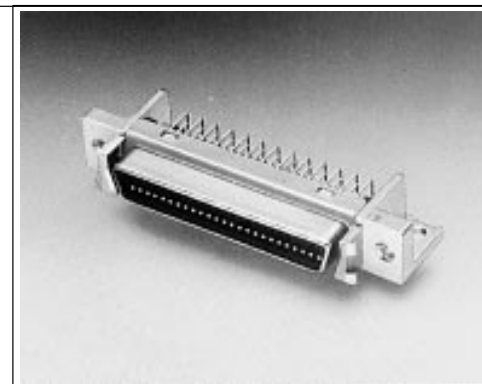
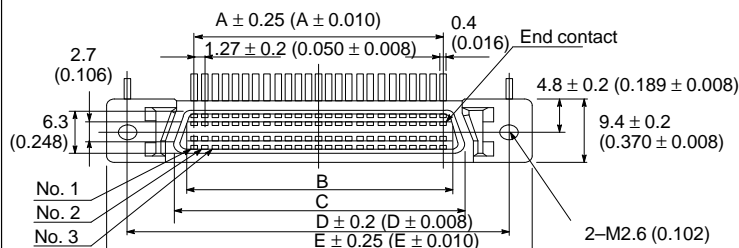
Unit: mm (in.)

PART NUMBERS

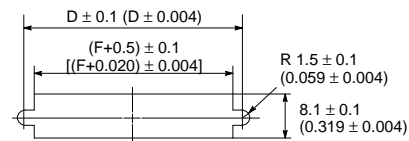
No. of Contacts	Part Number	Dimensions					
		A	B	C	D	E	F
20	FCN-244D020-G/E	11.43 (0.450)	13.45 (0.530)	16.45 (0.648)	27.45 (1.081)	33.35 (1.313)	23.30 (0.917)
26	FCN-244D026-G/E	15.24 (0.600)	17.26 (0.680)	20.26 (0.798)	31.26 (1.231)	37.16 (1.463)	27.11 (1.607)
36	FCN-244D036-G/E	21.59 (0.850)	23.61 (0.930)	26.61 (1.048)	37.61 (1.481)	43.51 (1.713)	33.46 (1.317)
50	FCN-244D050-G/E	30.48 (1.200)	32.50 (1.280)	35.50 (1.398)	46.50 (1.831)	52.40 (2.063)	42.35 (1.667)
68	FCN-244D068-G/E	41.91 (1.650)	43.93 (1.730)	46.93 (1.848)	57.93 (2.281)	63.83 (2.513)	53.78 (2.117)
80	FCN-244D080-G/E	49.53 (1.950)	51.55 (2.030)	54.55 (2.148)	65.55 (2.581)	71.45 (2.813)	61.40 (2.417)

# FCN-245D\*\*\*-G/\* RIGHT ANGLE TYPE, BOARD-SOCKET

## DIMENSIONS



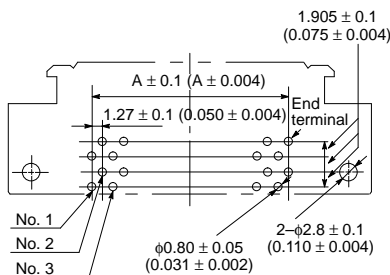
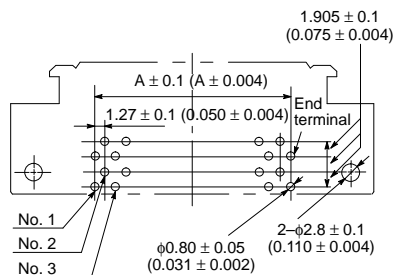
## RECOMMENDED PANEL LAYOUT



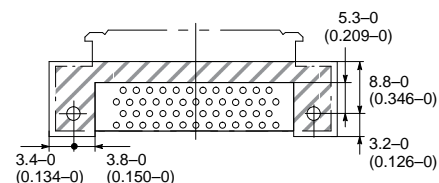
## MOUNTING HOLE LAYOUT (FROM MOUNT SIDE)

26, 50 contacts

26, 36, 68, 80 contacts



## PROHIBITED PATTERN AREA



Unit: mm (in.)

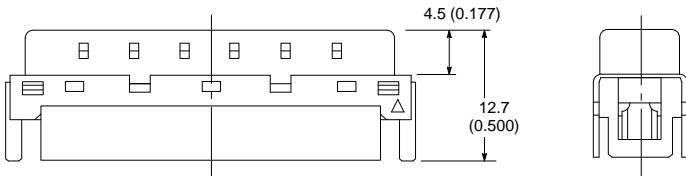
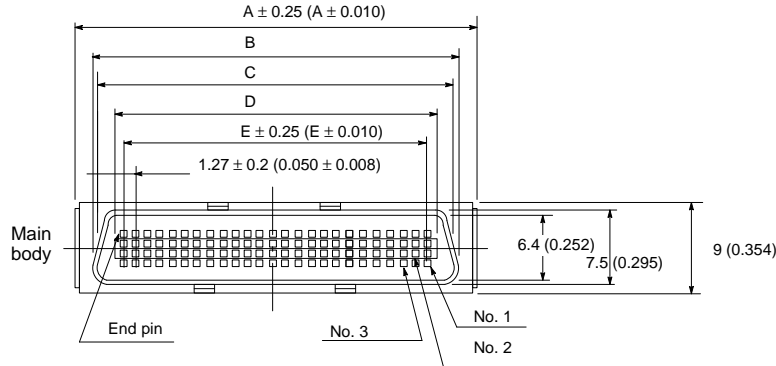
## PART NUMBERS

No. of Contacts	Part Number	Dimensions						
		A	B	C	D	E	F	
20	FCN-245D020-G/H	11.43	13.45	16.45	27.45	33.35	23.30	BOARD LOCKS
20	FCN-245D020-G/E	11.43	13.45	16.45	27.45	33.35	23.30	————
26	FCN-245D026-G/H	15.24	17.26	20.26	31.26	37.16	27.11	BOARD LOCKS
26	FCN-245D026-G/E	15.24	17.26	20.26	31.26	37.16	27.11	————
36	FCN-245D036-G/H	21.59	23.61	26.61	37.61	43.51	33.46	BOARD LOCKS
36	FCN-245D036-G/E	21.59	23.61	26.61	37.61	43.51	33.46	————
50	FCN-245D050-G/H	30.48	32.50	35.50	46.50	52.40	42.35	BOARD LOCKS
50	FCN-245D050-G/E	30.48	32.50	35.50	46.50	52.40	42.35	————
68	FCN-245D068-G/H	41.91	43.93	46.93	57.93	63.83	53.78	BOARD LOCKS
68	FCN-245D068-G/E	41.91	43.93	46.93	57.93	63.83	53.78	————
80	FCN-245D080-G/H	49.53	51.55	54.55	65.55	71.45	61.40	BOARD LOCKS
80	FCN-245D080-G/E	49.53	51.55	54.55	65.55	71.45	61.40	————

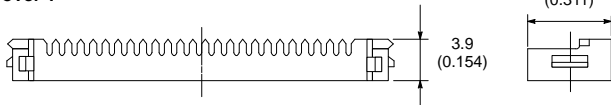
FCN-244D\*\*\*-G/E  
FCN-245D\*\*\*-G/\*  
FCN-247R\*\*\*-G/E

## FCN-247R\*\*\*-G/E IDC TYPE, CABLE-PLUG

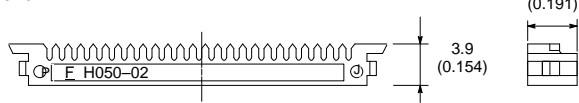
### DIMENSIONS



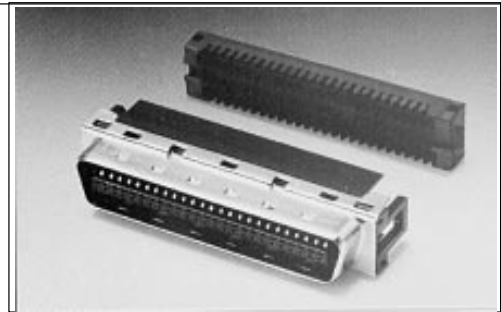
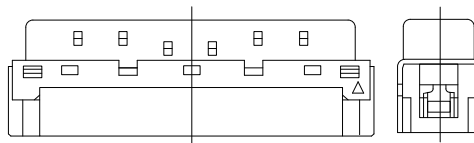
### Cover 1



### Cover 2



### Assembled

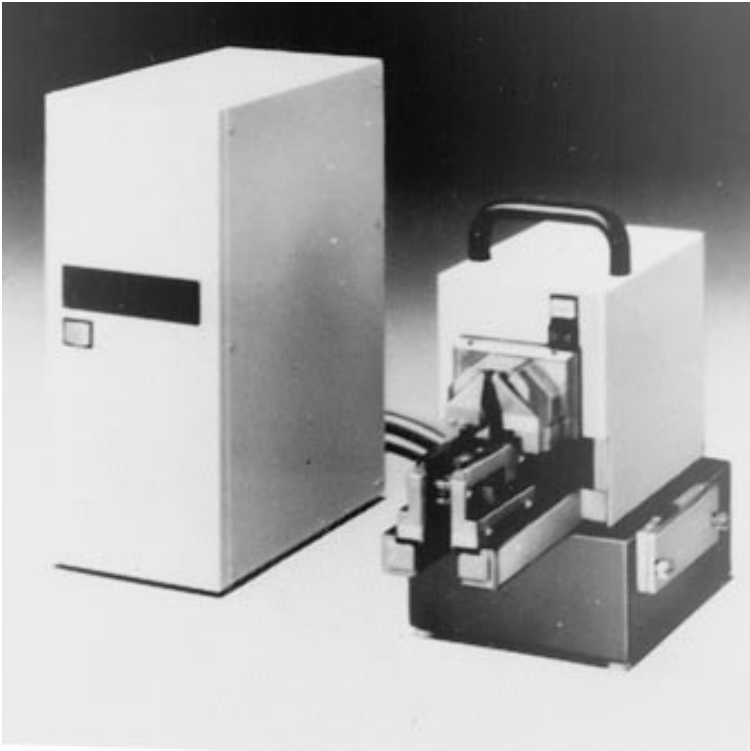


### PART NUMBERS

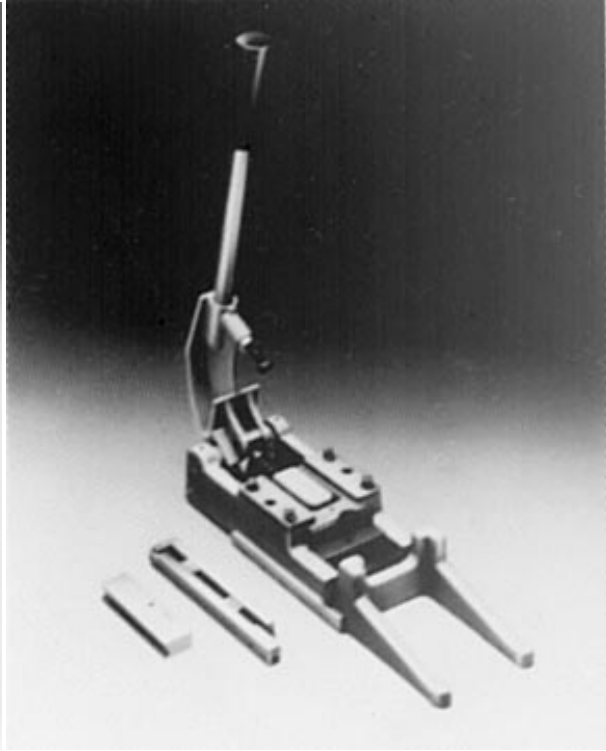
No. of Contacts	Part Number	Dimensions				
		A	B	C	D	E
20	FCN-247R020-G/E	21.24 (0.836)	17.55 (0.691)	16.55 (0.652)	13.25 (0.522)	11.43 (0.450)
26	FCN-247R026-G/E	25.05 (0.986)	21.36 (0.841)	20.36 (0.802)	17.06 (0.672)	15.24 (0.600)
36	FCN-247R036-G/E	31.40 (1.236)	27.71 (1.091)	26.71 (1.052)	23.41 (0.922)	21.59 (0.850)
50	FCN-247R050-G/E	40.29 (1.586)	36.60 (1.441)	35.60 (1.402)	32.30 (1.272)	30.48 (1.200)
68	FCN-247R068-G/E	51.72 (2.036)	48.03 (1.891)	47.03 (1.852)	43.73 (1.722)	41.91 (1.650)
80	FCN-247R080-G/E	59.34 (2.336)	55.65 (2.191)	54.65 (2.152)	51.35 (2.022)	49.53 (1.950)

FCN-244D\*\*\*-G/E  
FCN-245D\*\*\*-G/\*  
FCN-247R\*\*\*-G/E

Semi-automatic cable aligner  
Cable Aligning Machine  
Main Body (FCN-M561-A)



IDC TOOL



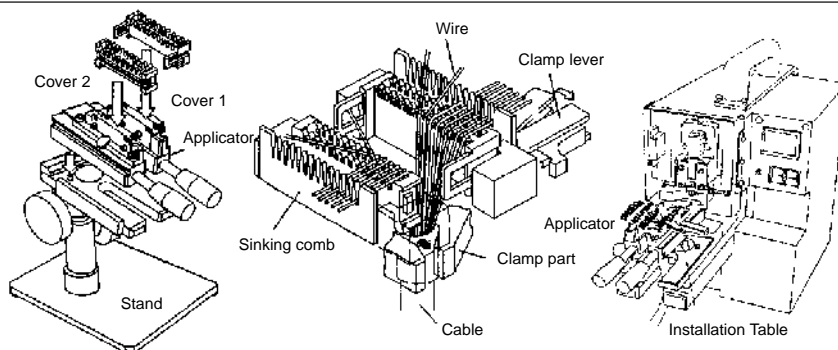
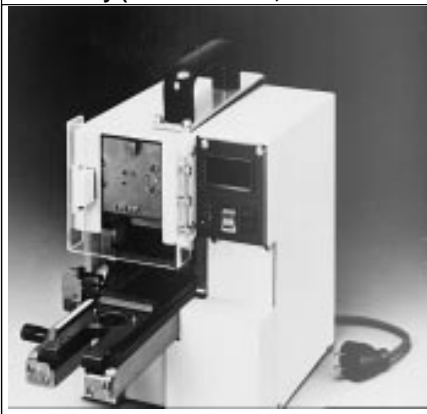
FCN-240R SERIES IDC ROUND-CABLE CONNECTORS

PLUG: 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   80	#28 or #30 (0.5 to 0.65)	FCN-247R020-G/E   FCN-247R080G/E	FCN-247T-T061/H	(See below*)	HAND PRESS: FCN-236T-T109/H HEAD & TABLE: FCN-247T-T068/H

\*Semi-Automatic Cable Aligner  
Body :FCN-M561-A  
Controler :FCN-B561-120 (FOR 120V), FCN-B561-220 (FOR 220V)  
Bed :FCN-P560-2/J  
Adapter :FCN-K560-J-\*\*\* (\*\*\*:020, 028, 036, 050, 068, 080, 096)

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



1. Set the applicator on the stand.  
Set covers 1 and 2 in the applicator

2. Push the wires into the sinking  
combs.

3. Set the applicator onto the  
installation table and begin  
cable alignment.

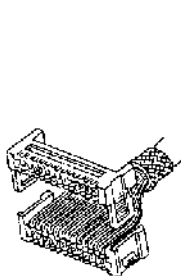
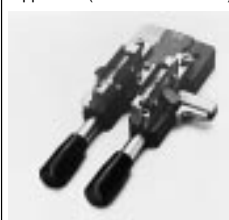
Head (FCN-H550-1/A)

Stand (FCN-D550)

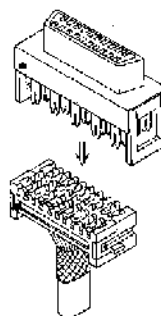


Applicator (FCN-A550-1/A-xxx)

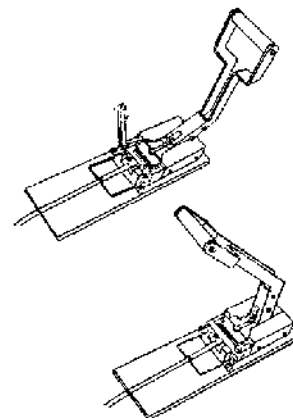
IDC Tool (FCN-237T-T109/H,  
FCN-237T-T067/H locator)



4. Take the covers off the  
applicator.



5. Put covers together and  
pre-assemble them to  
the connector body.



6. Conduct final assembly as shown.

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**FCN-240R SERIES IDC ROUND-CABLE CONNECTORS**

**PLUG: 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   80	#28 or #30 (0.5 to 0.65)	FCN-247R020-G/E   FCN-247R080-G/E	FCN-247T-T061/H	(See below*)	HAND PRESS: FCN-236T-T109/H HEAD & TABLE: FCN-247T-T068/H

Semi-automatic-Medium Level

Body: :FCN-M551-120

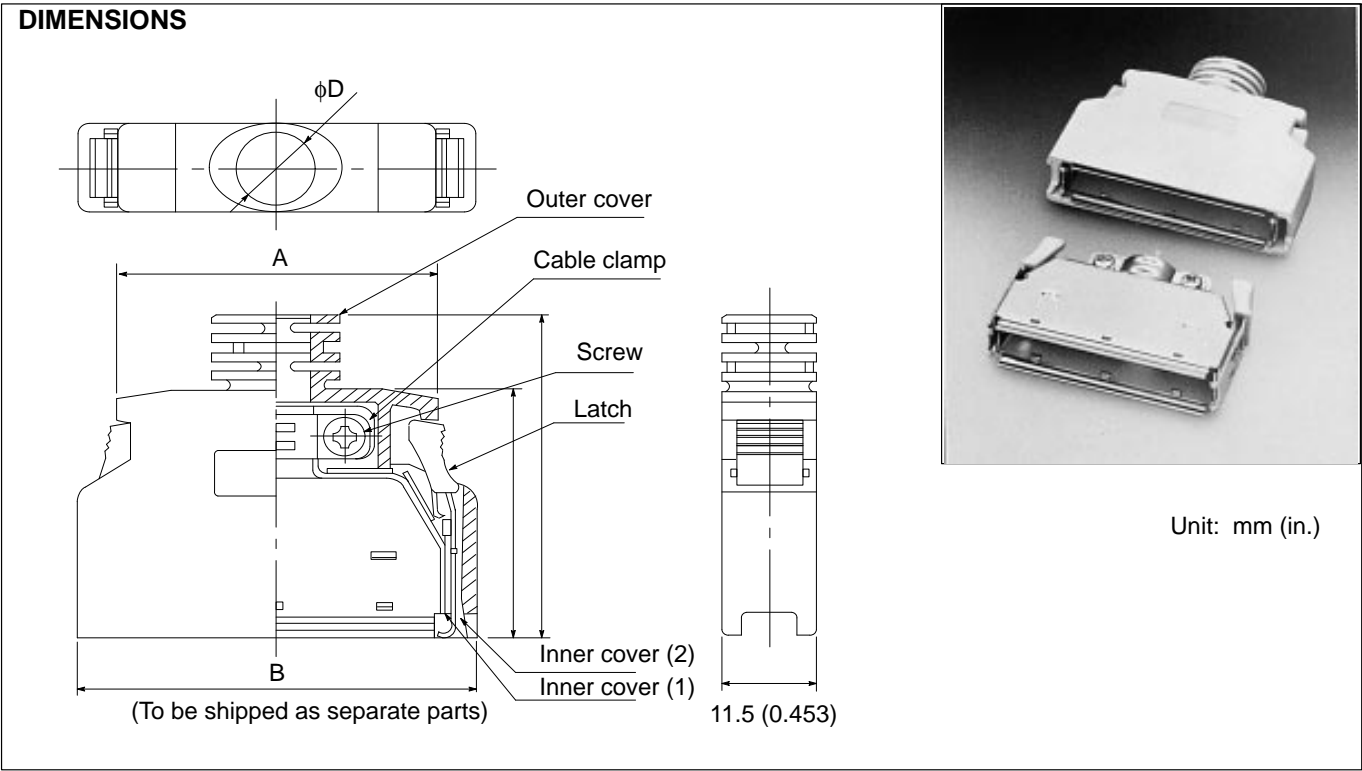
Head Assembly: :FCN-H550

Applicator: :FCN-A550-1/J-\*\*\* (\*\*\*: 020, 028, 036, 050, 068, 080)

Stand: :FCN-D550

FCN-244D\*\*\*-G/E  
FCN-245D\*\*\*-G/\*  
FCN-247R\*\*\*-G/E

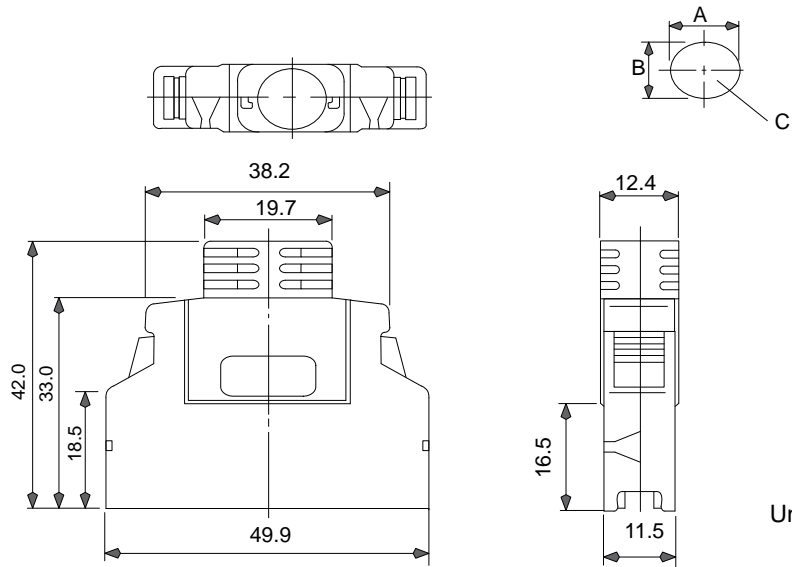
FCN-240C\*\*\*-A/S PLUG COVER



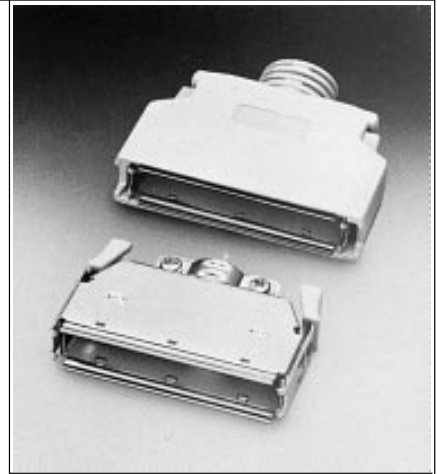
PART NUMBERS

No. of Contacts	Part Number	Dimensions			
		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 (1.567)	32.00 (1.260)	8.2 (0.323)
50	FCN-240C050-A/S	39.00 (1.535)	48.70 (1.917)	32.00 (1.260)	8.7 (0.343)
68	FCN-240C068-A/S	50.43 (1.985)	60.13 (2.367)	32.00 (1.260)	9.1 (0.358)
80	FCN-240C080-A/S	58.05 (2.285)	67.75 (2.667)	32.00 (1.260)	9.7 (0.382)

# DIMENSIONS



Unit mm (in.)



2

# PART NUMBERS

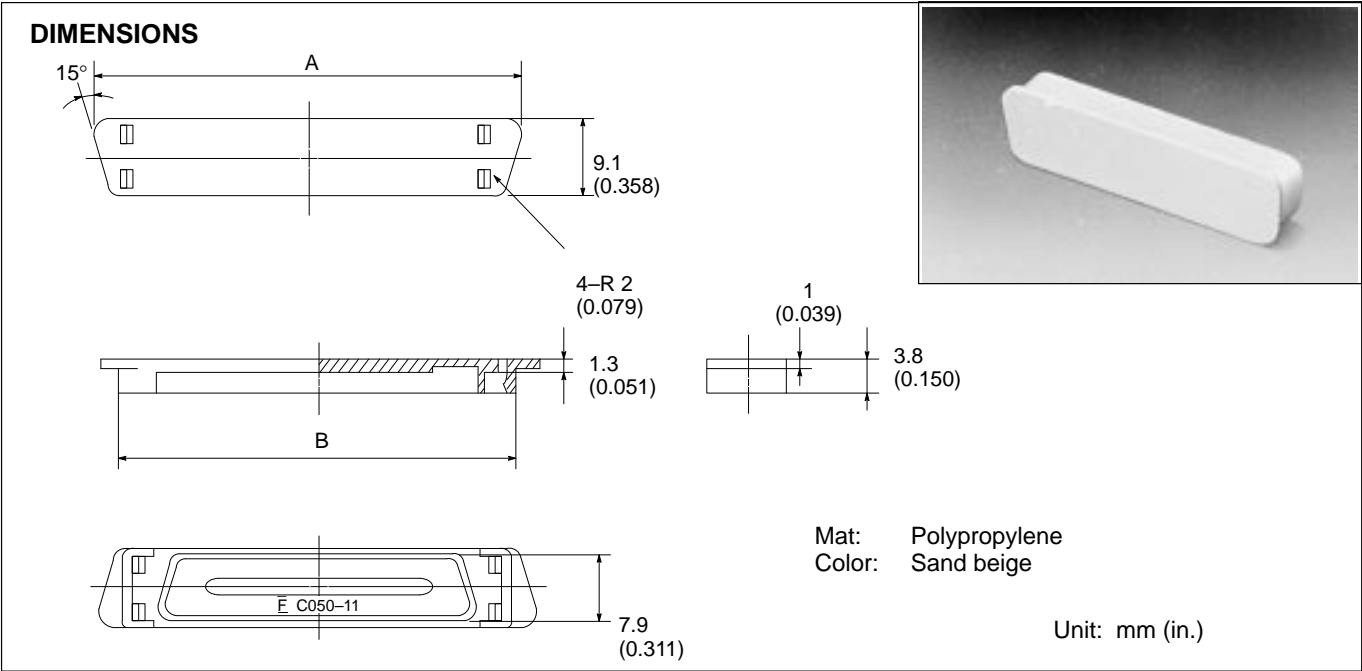
No. of contacts	Part number	Dimensions	
		A × B	C
50	FCN-240C050-B/S	12.45 × 11.0 (0.490 × 0.433)	R5.5
50	FCN-240C050-D/S	11.05 × 9.40 (0.435 × 0.390)	R4.7



FCN-244D\*\*\*-G/E  
FCN-245D\*\*\*-G/\*  
FCN-247R\*\*\*-G/E

FCN-230C\*\*\*-11 DUST CAP FOR SOCKET

2



PART NUMBERS

No. of Contacts	Part Number	Dimensions	
		A	B
36	FCN-230C036-11	40.8 (1.606)	35.2 (1.386)
50	FCN-230C050-11	49.7 (1.957)	44.1 (1.736)

APPLICATION

