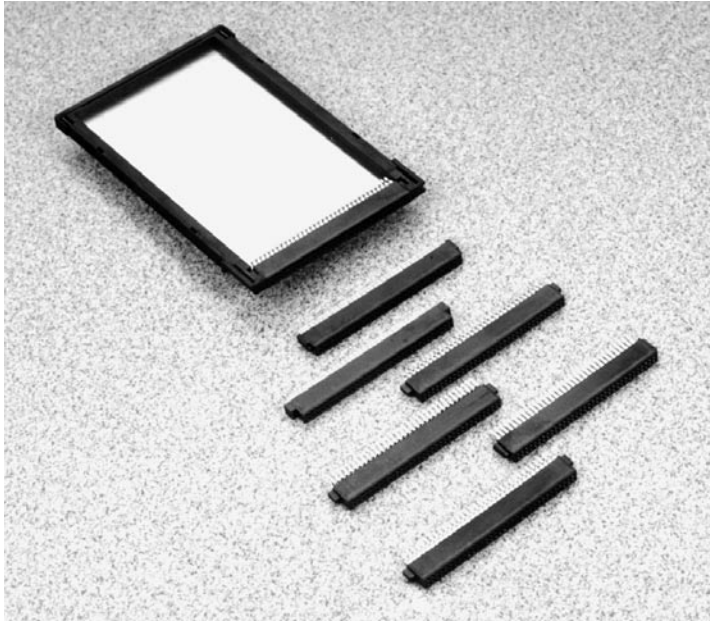




# 68 Position PC Card Receptacles - 962 Series



Methode's 68 position receptacles are PCMCIA and JEIDA compatible and are available in multiple standard or custom solder tail configurations. The independent dual beam contact design insures extended reliability, redundant electrical contact and consistent mechanical performance.

- Meets PC Card standards
- Durable contact design withstands repeated card insertions in excess of 10,000 cycles
- Flexible contact tail forming tool offers alternatives for custom applications
- Unique mold design offers flexibility to customize mounting ear configurations
- Materials are compatible with high temperature soldering processes
- Designed for use with Methode/Duel Systems and Sonic Welded Frame Kits
- Also available with ground clips

## Specifications

### Materials

**Contact Material:** High Performance Copper alloy

**Contact Plating:** 15 µin Select gold (30µin optional) in contact area over low stress nickel over all. 100 micro inch minimum 60/40 Sn/Pb in tail area.

**Insulator Material:** LCP 94V-0 rated high temperature thermoplastic

**Operating Temperature:** -55°C to +85°C

### Mechanical Performance

**Durability:** 10,000 cycles

**Insertion Force:** 6.0 lbs (2.7 Kg) max.

**Withdrawal Force:** 10 grams min. per contact

### Electrical Performance

**Current Rating:** 0.5 A DC

**Contact Resistance:** 40 mΩ (initial) D resistance £ 20 milliohms (final)

**Dielectric Strength:** 500 V AC for 1 minute

### PART NUMBER LEGEND

**962-XX-68SMXX-XX(XX)**

#### PACKAGING

TR = Tape & Reel 56mm width, 16mm pitch see packing spec

TL = Tape & Reel 56mm width, 16mm pitch see packing spec (marking down)

T7 = Tape & Reel 72mm width, 16mm pitch see packing spec

TL8 = Tape & Reel 72mm width, 16mm pitch (see packing spec)

#### PLATING

23 = 30 µin gold

24 = 15 µin gold

#### TAIL STYLE

19 = 19 Tail Style

22 = 22 Tail Style

39 = 39 Tail Style

44 = 44 Tail Style

46 = 46 Tail Style

50 = 50 Tail Style

#### MOUNTING EAR STYLE

03 = Style no. 3

09 = Style no. 9

12 = Style no. 12

15 = Style no. 15

**Note:** Consult factory for other tail styles and other ear configurations



North and South America:

**Methode Electronics, Inc. Connector Products**

1700 Hicks Road • Rolling Meadows, IL 60008 USA

847-392-3500 • Toll Free: 800-323-6864 • Fax: 847-392-9404

Email: info@methode.com • Web: www.methode.com/connector/index.html

Europe:

**Methode Electronics Ireland, Ltd.**

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Email: info@methode.ie • Web: ireland.methode.com/main.html

Far East:

**Methode Electronics Far East, Pte. Ltd.**

1 Tuas Lane, Jurong Town • Singapore 638610

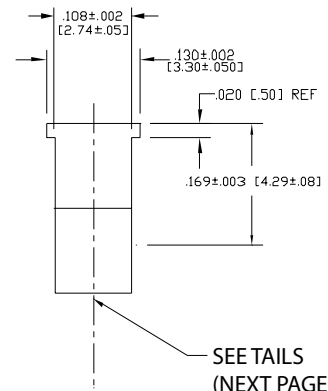
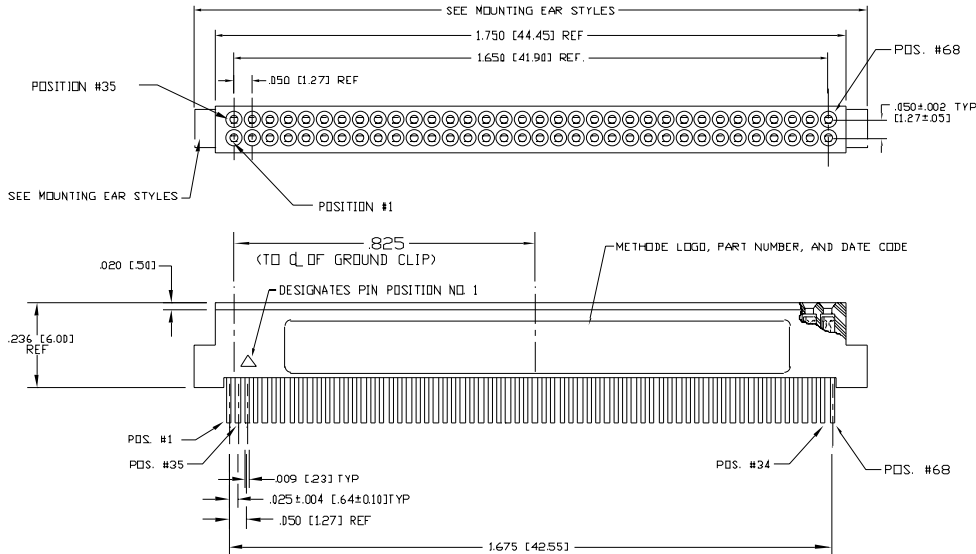
65-68615444 • Fax: 65-68614777

Email: sales@methode.com.sg • Web: www.methode.com/mefe/index.html

# 68 Position PC Card Receptacle - 962 Series

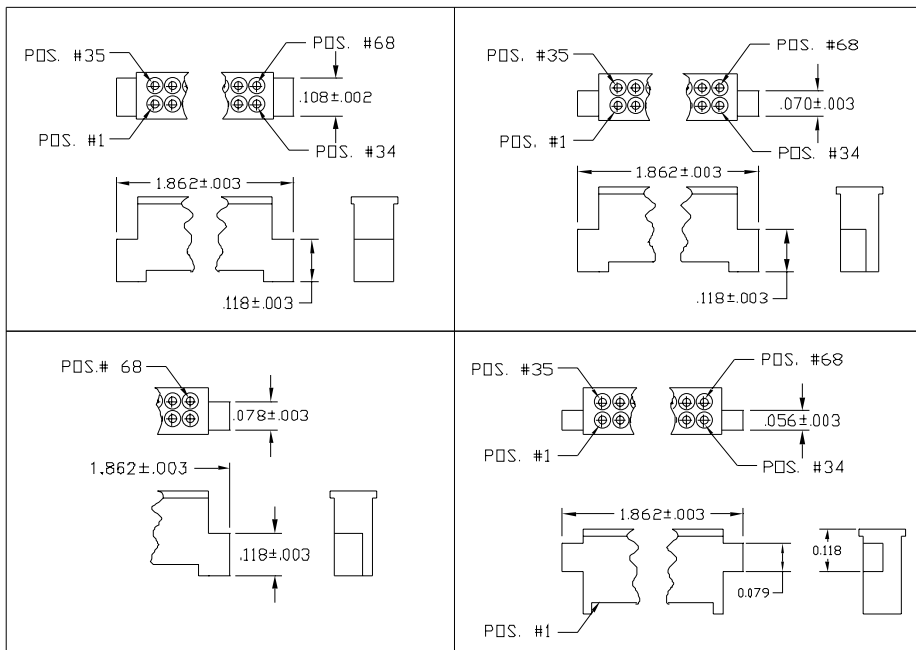


SCALE 2:1  
ASSEMBLY DIMENSIONS



03 MOUNTING EAR STYLE

09 MOUNTING EAR STYLE  
PLEASE CONSULT FACTORY FOR AVAILABILITY



12 MOUNTING EAR STYLE  
PLEASE CONSULT FACTORY FOR AVAILABILITY

15 MOUNTING EAR STYLE



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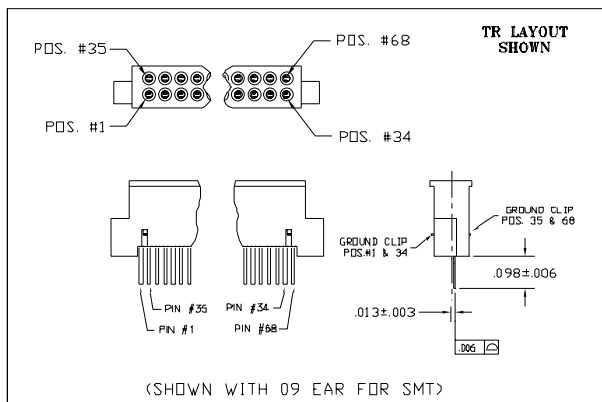
Europe:  
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 Email: info@methode.ie • Web: ireland.methode.com/main.html

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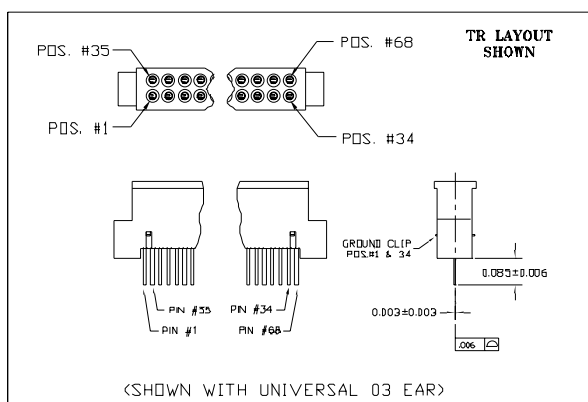
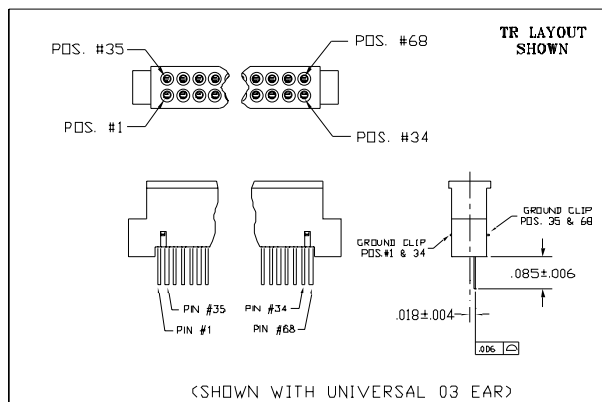
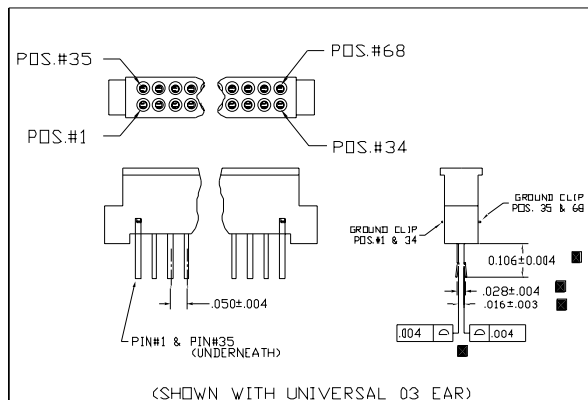


# 68 Position PC Card Receptacle - 962 Series

19 TAIL STYLE  
SEE 19 TAIL BOARD LAYOUT

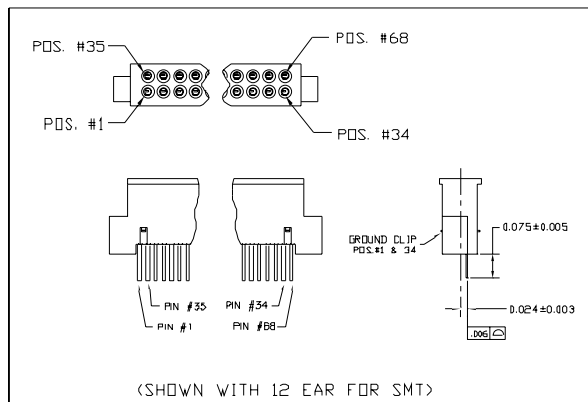
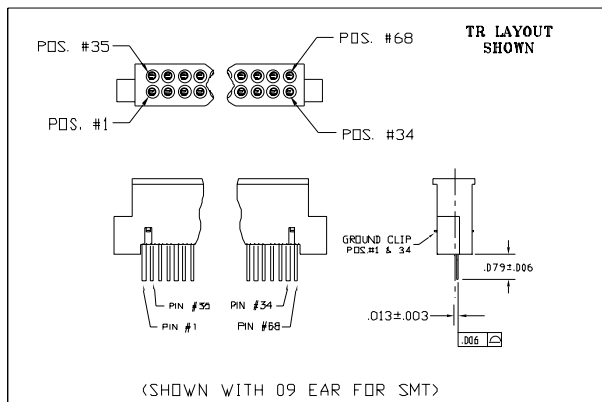


22 TAIL STYLE  
SEE BOARD LAYOUT 02



39 TAIL STYLE  
SEE 39 TAIL BOARD LAYOUT

44 TAIL STYLE  
SEE 44 TAIL BOARD LAYOUT



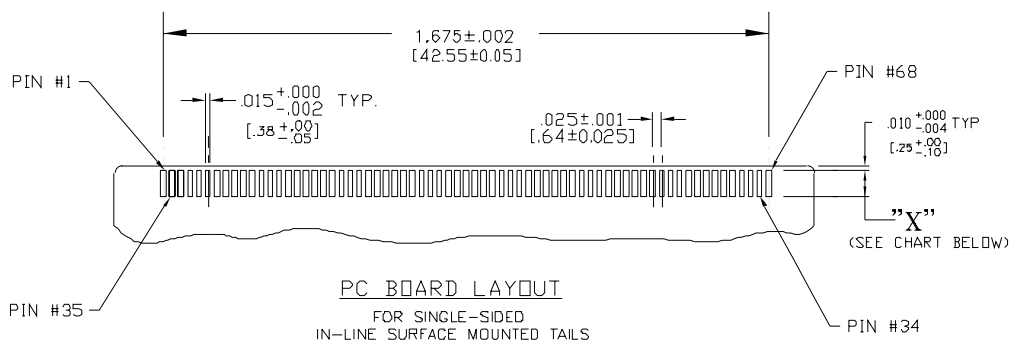
46 TAIL STYLE  
SEE 46 TAIL BOARD LAYOUT

50 TAIL STYLE  
SEE 50 TAIL STYLE BOARD LAYOUT

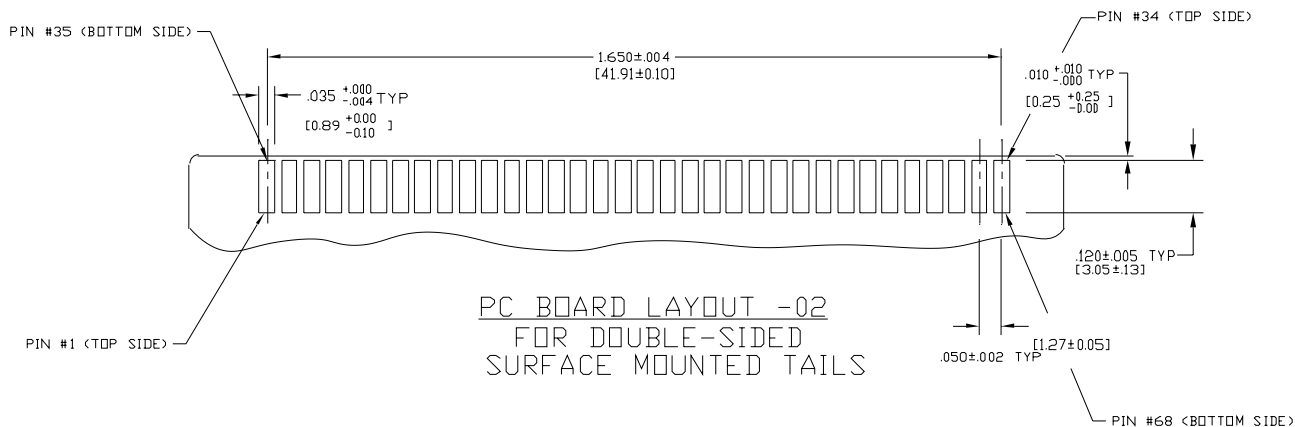




# 68 Position PC Card Receptacles - 962 Series

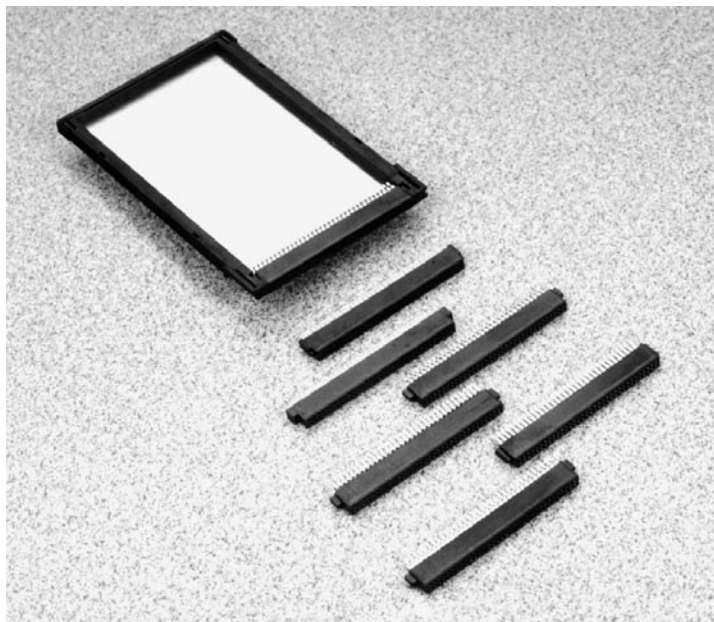


TAIL STYLE	"X" ±.004 (INCH)
"19"	.098
"39"	.085
"44"	.085
"46" & "50"	.079



PACKAGING SPECS			
<p><b>TR</b> PACKAGING 56mm PACKING TAPE</p> <p>NOTE: BOARD LIES BELOW CENTERLINE OF CONNECTOR IN SIDE VIEW</p>	<p><b>TY</b> PACKAGING 72mm PACKING TAPE</p> <p>SIMILAR TO "TR" EXCEPT 72mm TAPE IS USED HERE</p>	<p><b>TL6</b> PACKAGING 56mm PACKING TAPE</p> <p>NOTE: BOARD LIES ABOVE CENTERLINE OF CONNECTOR IN SIDE VIEW</p>	<p><b>TL7</b> PACKAGING 72mm PACKING TAPE</p> <p>SIMILAR TO "TL6" EXCEPT 72mm TAPE IS USED HERE</p>
<p><b>TL</b> PACKAGING 56mm PACKING TAPE</p> <p>NOTE: BOARD LIES ABOVE CENTERLINE OF CONNECTOR IN SIDE VIEW</p>			

# 68 Position PC Card Receptacles with Ground Clip - 962 Series



## Features

- Integral ground clip eliminates the need for board mounted ground contacts and additional solder pads
- Meets PC Card standards
- Durable contact design withstands repeated card insertions in excess of 10,000 cycles
- Flexible contact tail forming tool offers alternatives for custom applications
- Unique mold design offers flexibility to customize mounting ear configurations
- Materials are compatible with high temperature soldering processes
- Designed for use with Methode/Duel Systems and Sonic Welded Frame Kits

## Specifications

### Materials

**Contact Material:** High Performance Copper alloy

**Contact Plating:** 15 µin Select gold (30µin optional) in contact area over low stress nickel over all. 100 micro inch minimum 60/40 Sn/Pb in tail area.

**Ground Clip Material:** Tin plated phosphor bronze

**Insulator Material:** LCP 94V-0 rated high temperature thermoplastic

**Operating Temperature:** -55°C to +85°C

### Mechanical Performance

**Durability:** 10,000 cycles

**Insertion Force:** 6.0 lbs (2.7 Kg) max.

**Withdrawal Force:** 10 grams min. per contact

### Electrical Performance

**Current Rating:** 0.5 A DC

**Contact Resistance:** 40 milliohms (initial) D resistance £ 20 milliohms (final)

**Dielectric Strength:** 500 V AC for 1 minute

## PART NUMBER LEGEND

### 962-XX-68XSMXX-XX(XX)

#### PACKAGING

TR = Tape & Reel 56mm width, 16mm pitch  
see packing spec

TL = Tape & Reel 56mm width, 16mm pitch  
see packing spec (marking down)

T5 = Tape & Reel 56mm width, 16m pitch  
see packing spec

T7 = Tape & Reel 72mm width, 16mm pitch  
see packing spec

TL8 = Tape & Reel 56mm width, 16mm pitch  
see packing spec

#### PLATING

23 = 30 µin gold

27 = 15µin gold

#### TAIL STYLE

19 = 19 Tail Style

39 = 39 Tail Style

44 = 44 Tail Style

46 = 46 Tail Style

50 = 50 Tail Style

#### NUMBER OF GROUND CLIPS

01 = Slots position #1 & #35

02 = Slots position #34 & #68

03 = Slots position #1, #34, #35, #68

04 = Slots position #1 & #685

05 = Slots position #34 & #35

#### MOUNTING EAR STYLE

03 = Style no. 3

09 = Style no. 9

12 = Style no. 12

15 = Style no. 15



North and South America:

Methode Electronics, Inc. Connector Products

1700 Hicks Road • Rolling Meadows, IL 60008 USA

847-392-3500 • Toll Free: 800-323-6864 • Fax: 847-392-9404

Email: info@methode.com • Web: www.methode.com/connector/index.html

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Far East:

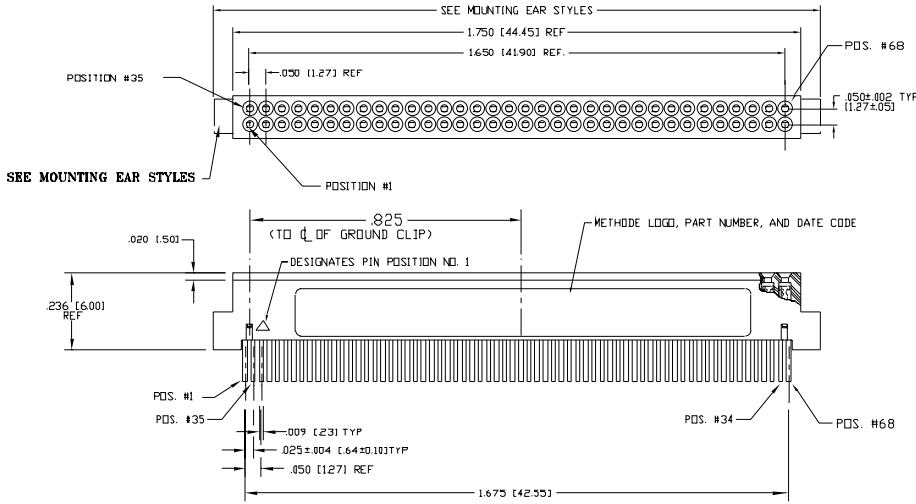
Methode Electronics Far East, Pte. Ltd.

1 Tuas Lane, Jurong Town • Singapore 638610

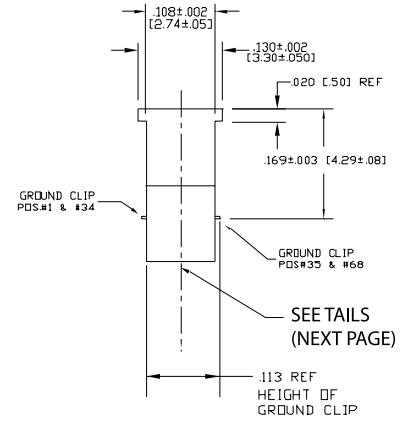
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Email: sales@methode.com.sg • Web: www.methode.com/mefe/index.html

# 68 Position PC Card Receptacles with Ground Clip - 962 Series

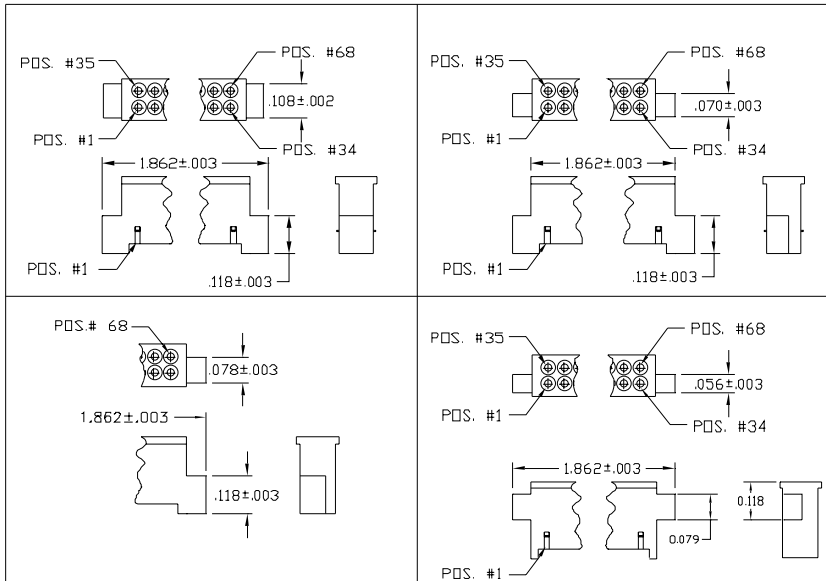


SCALE 2:1  
ASSEMBLY DIMENSIONS



03 MOUNTING EAR STYLE

09 MOUNTING EAR STYLE  
PLEASE CONSULT FACTORY FOR AVAILABILITY



12 MOUNTING EAR STYLE  
PLEASE CONSULT FACTORY FOR AVAILABILITY

15 MOUNTING EAR STYLE



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Email: info@methode.ie • Web: ireland.methode.com/main.html

Far East:

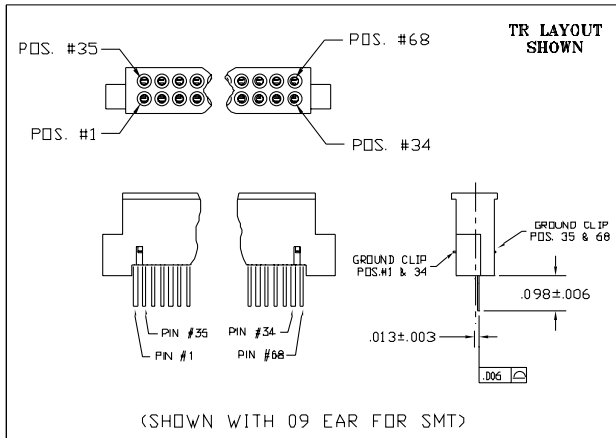
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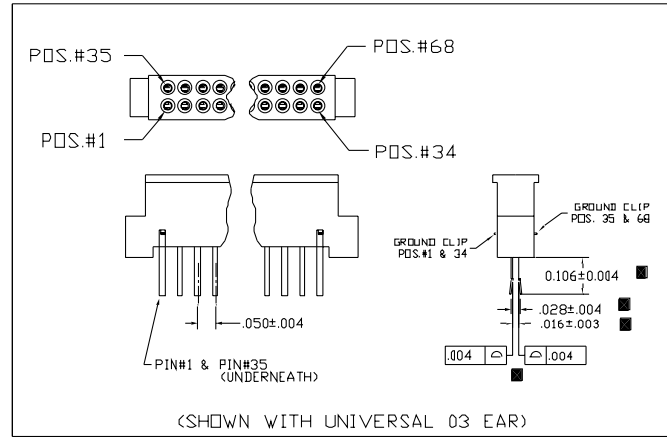
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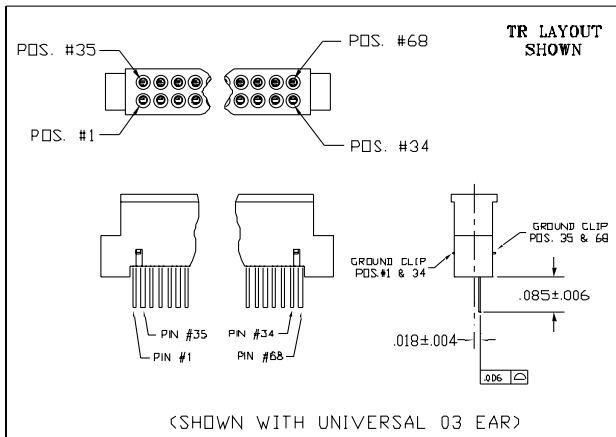
# 68 Position PC Card Receptacles with Ground Clip - 962 Series



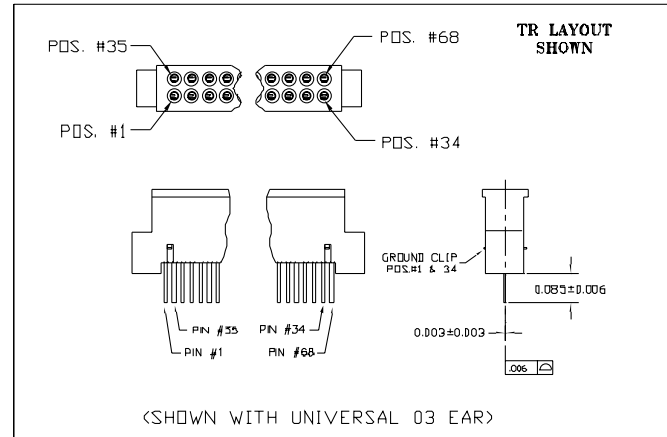
19 TAIL STYLE  
SEE 19 TAIL BOARD LAYOUT



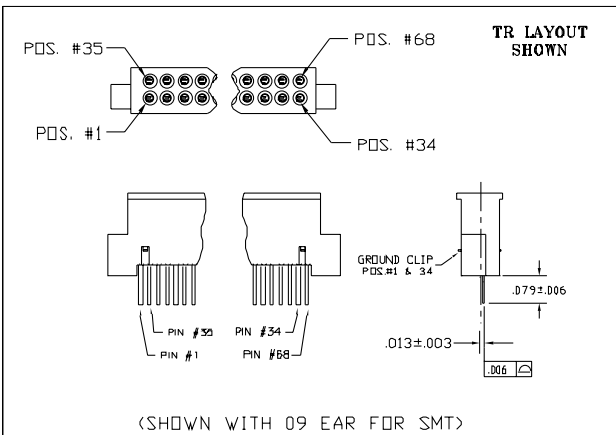
22 TAIL STYLE  
SEE BOARD LAYOUT 02



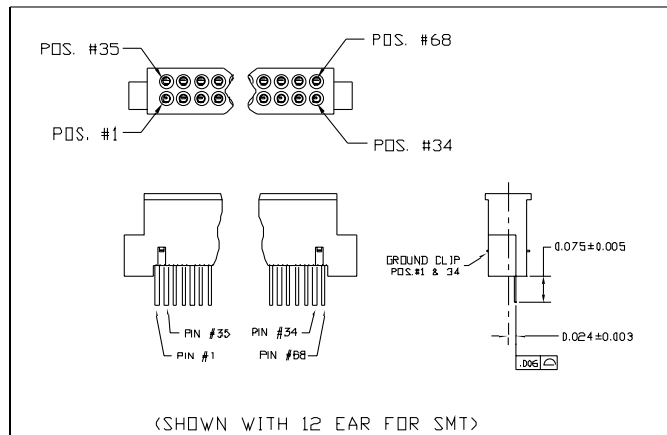
39 TAIL STYLE  
SEE 39 TAIL BOARD LAYOUT



44 TAIL STYLE  
SEE 44 TAIL BOARD LAYOUT



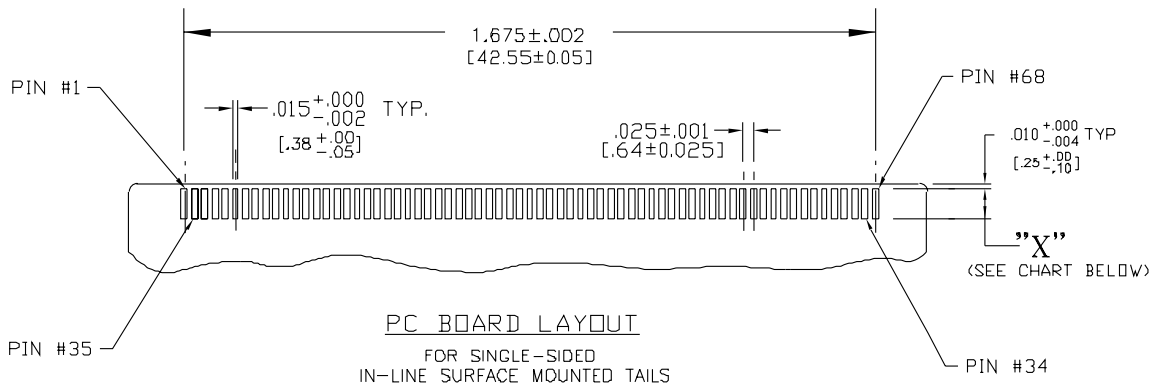
46 TAIL STYLE  
SEE 46 TAIL BOARD LAYOUT



50 TAIL STYLE  
SEE 50 TAIL STYLE BOARD LAYOUT



# 68 Position PC Card Receptacles with Ground Clip - 962 Series



TAIL STYLE	"X" ±.004 ±.000 (INCH)
"19"	.098
"39"	.085
"44"	.085
"46" & "50"	.079

<b>PACKAGING SPECS</b>			
<b>"TR" PACKAGING</b> 56mm PACKING TAPE   PART NO. I.D. AND PIN# 1 I.D. THIS SIDE  PART NO. I.D. AND PIN# 1 I.D. THIS SIDE PC BOARD  <b>NOTE: BOARD LIES BELOW CENTERLINE OF CONNECTOR IN SIDE VIEW</b>	<b>"T7" PACKAGING</b> 72mm PACKING TAPE  SIMILAR TO "TR" EXCEPT 72mm TAPE IS USED HERE	<b>"TL5" PACKAGING</b> 56mm PACKING TAPE   PART NO. I.D. AND PIN# 1 I.D. THIS SIDE  PART NO. I.D. AND PIN# 1 I.D. THIS SIDE  <b>NOTE: BOARD LIES ABOVE CENTERLINE OF CONNECTOR IN SIDE VIEW</b>	<b>"TL6" PACKAGING</b> 72mm PACKING TAPE  SIMILAR TO "TL5" EXCEPT 72mm TAPE IS USED HERE
<b>"TL" PACKAGING</b> 56mm PACKING TAPE   PART NO. I.D. AND PIN# 1 I.D. THIS SIDE  PART NO. I.D. AND PIN# 1 I.D. THIS SIDE  <b>NOTE: BOARD LIES ABOVE CENTERLINE OF CONNECTOR IN SIDE VIEW (FOR SURFACE MOUNT STYLE)</b>			



# 50 Position Compact Flash Receptacles - 962 Series



## Features

- Designed for use with the Methode/Duel Systems CFA Sonic Welded Frame Kits
- Flexible contact tail tool forming offers alternatives for custom applications
- Unique mold design offers flexibility to customize mounting ear configurations
- Durable contact design withstands repeated card insertions in excess of 10,000 cycles
- Meets CFA standards
- Materials are compatible with high temperature soldering processes
- Also available with ground clip

## Specifications

### Materials

**Contact Material:** High Performance Copper alloy

**Contact Plating:** 15 µin Select gold (30µin optional) in contact area over low stress nickel over all. 100 micro inch minimum 60/40 Sn/Pb in tail area.

**Insulator Material:** LCP 94V-0 rated high temperature thermoplastic

**Operating Temperature:** -55°C to +85°C

### Mechanical Performance

**Durability:** 10,000 cycles

**Insertion Force:** 6.0 lbs (2.7 Kg) max.

**Withdrawal Force:** 10 grams min. per contact

### Electrical Performance

**Current Rating:** 0.5 A DC

**Contact Resistance:** 40 milliohms (initial) D resistance £ 20 milliohms (final)

**Dielectric Strength:** 500 V AC for 1 minute

## PART NUMBER LEGEND

### 962-XX-50SMXX-XX(XX)

#### PACKAGING

TR = Tape & Reel 56mm width, 16mm pitch tails down & marking up, see packaging ref. (offset board mounting style)

TL5 = Tape & Reel 56mm width, 16mm pitch tails up & marking up, see packaging ref. (centered board mounting style)

#### PLATING

23 = 30µin gold

27 = 15 µin gold

#### TAIL STYLE

19 = 19 Tail Style

22 = 22 Tail Style

45 = 45 Tail Style

46 = 46 Tail Style

48 = 48 Tail Style

49 = 49 Tail Style

#### MOUNTING EAR STYLE

03 = 3 ear style standard

09 = 9 ear style standard

14 = 14 ear style standard

16 = 16 ear style standard

17 = 17 ear style standard



#### North and South America:

**Methode Electronics, Inc. Connector Products**

1700 Hicks Road • Rolling Meadows, IL 60008 USA

847-392-3500 • Toll Free: 800-323-6864 • Fax: 847-392-9404

Email: info@methode.com • Web: www.methode.com/connector/index.html

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Email: info@methode.ie • Web: ireland.methode.com/main.html

#### Far East:

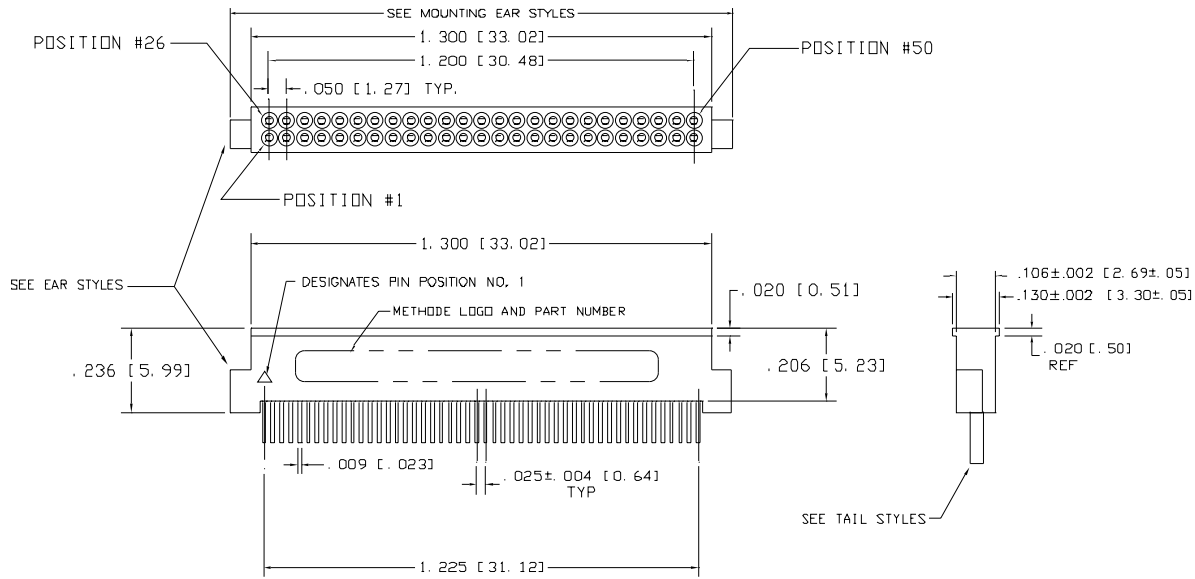
**Methode Electronics Far East, Pte. Ltd.**

1 Tuas Lane, Jurong Town • Singapore 638610

65-68615444 • Fax: 65-68614777

Email: sales@methode.com.sg • Web: www.methode.com/mefe/index.html

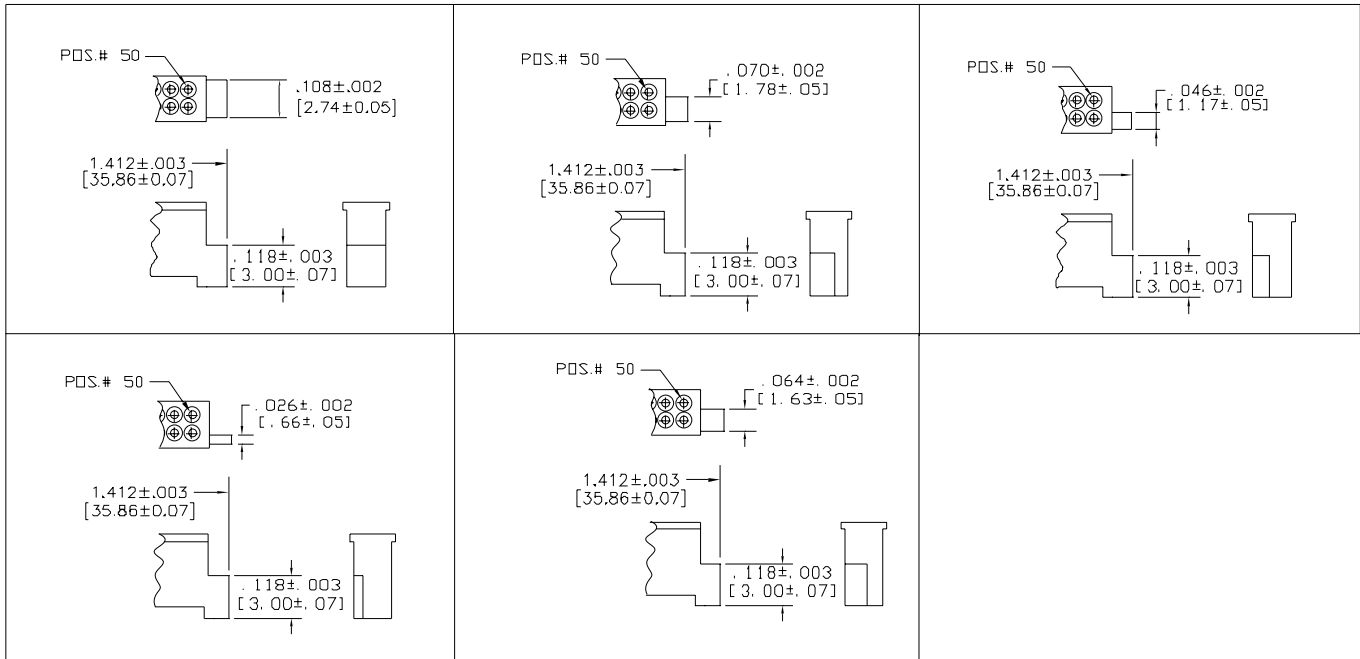
# 50 Position Compact Flash Receptacles - 962 Series



03 MOUNTING EAR STYLE

09 MOUNTING EAR STYLE

14 MOUNTING EAR STYLE



16 MOUNTING EAR STYLE

17 MOUNTING EAR STYLE



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Far East:

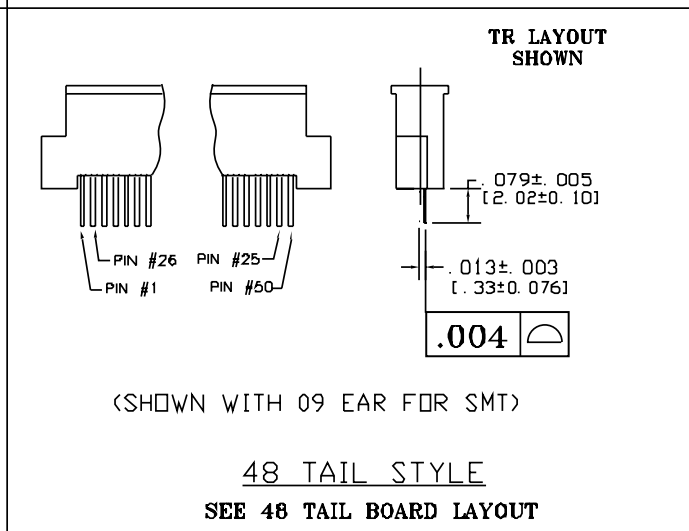
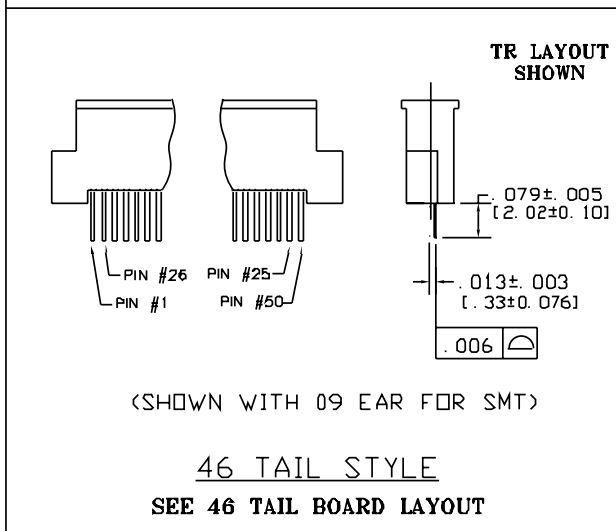
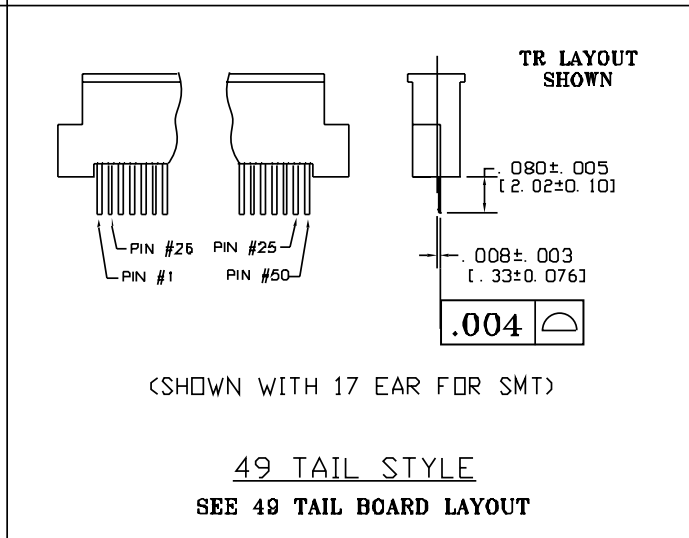
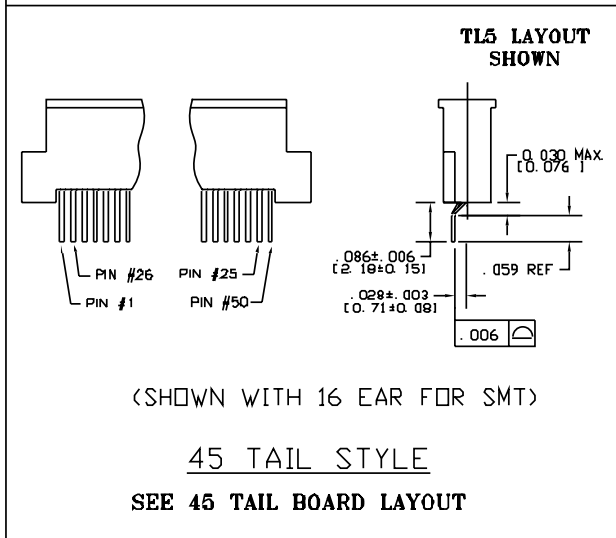
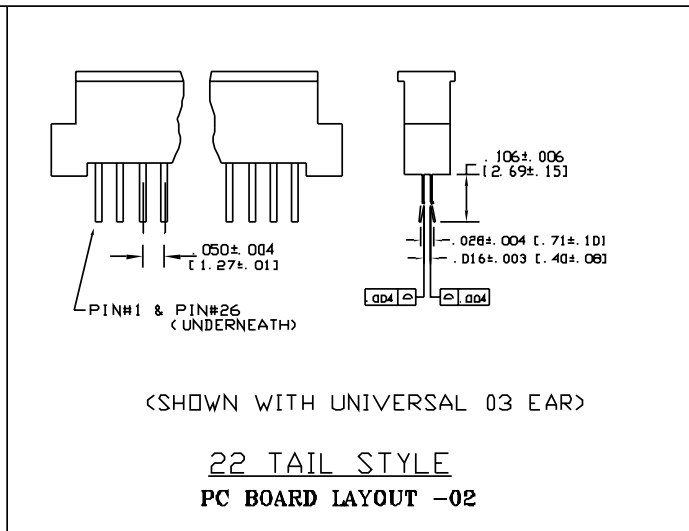
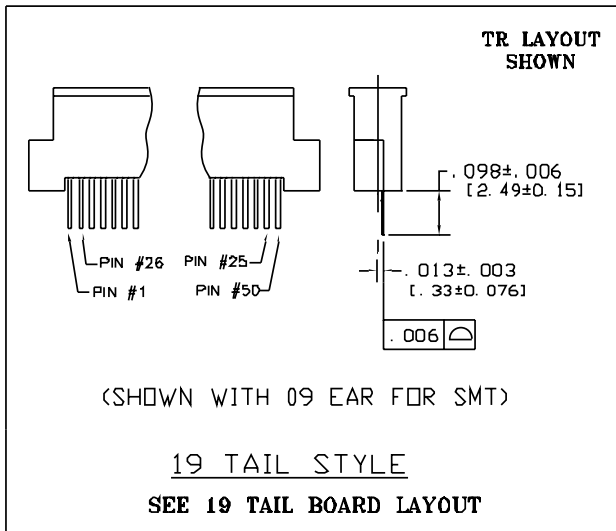
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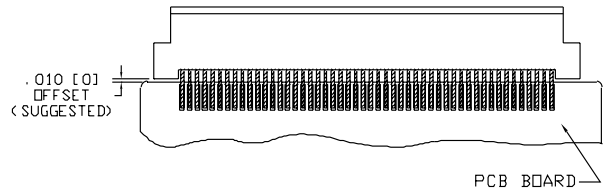
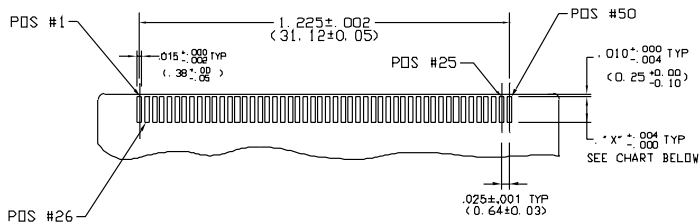
65-68615444 • Fax: 65-68614777

Email: sales@methode.com.sg • Web: www.methode.com/mefe/index.html

# 50 Position Compact Flash Receptacles - 962 Series

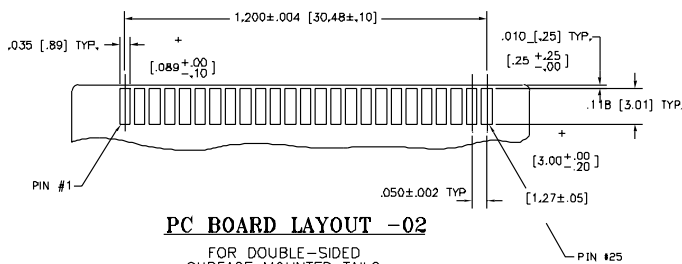


# 50 Position Compact Flash Receptacles - 962 Series



TAIL STYLE	"X" LENGTH
" 19"	" 0.096"
" 44"	" 0.085"
" 45"	" 0.060"
" 46, 48"	" 0.077"
" 49, 51"	" 0.077"

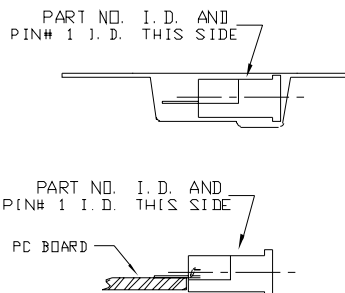
PC BOARD LAYOUT  
FOR SINGLE-SIDED  
IN-LINE SURFACE MOUNTED TAILS



PC BOARD LAYOUT -02  
FOR DOUBLE-SIDED  
SURFACE MOUNTED TAILS

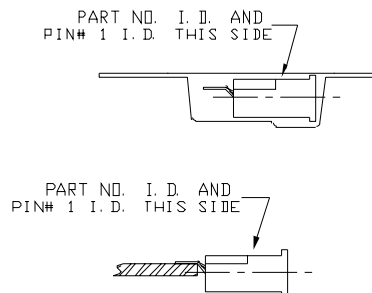
## PACKAGING SPEC REFERENCE

### "TR" PACKAGING OFFSET BOARD MOUNT



NOTE: CONTACT TAILS LIE  
BELOW CENTERLINE OF  
INSULATOR IN SIDE  
VIEW

### "TL5" PACKAGING CENTER BOARD MOUNT



NOTE: CONTACT TAILS LIE  
ABOVE CENTERLINE OF  
INSULATOR IN SIDE  
VIEW



# 50 Position Compact Flash Receptacles with Ground Clip - 962 Series



## Features

- Integral Ground Clip eliminates the need for board mounted ground contacts and additional solder pads
- Designed for use with the Methode/Duel Systems CFA Sonic Welded Frame Kits
- Flexible contact tail tool forming offers alternatives for custom applications
- Unique mold design offers flexibility to customize mounting ear configurations
- Durable contact design withstands repeated card insertions in excess of 10,000 cycles
- Meets CFA standards
- Materials are compatible with high temperature soldering processes

## Specifications

### Materials

**Contact Material:** High Performance Copper alloy

**Contact Plating:** 15 µin Select gold (30µin optional) in contact area over low stress nickel over all. 100 micro inch minimum 60/40 Sn/Pb in tail area.

**Ground Clip Material:** Tin plated phosphor bronze

**Insulator Material:** LCP 94V-0 rated high temperature thermoplastic

**Operating Temperature:** -55°C to +85°C

### Mechanical Performance

**Durability:** 10,000 cycles

**Insertion Force:** 6.0 lbs (2.7 Kg) max.

**Withdrawal Force:** 10 grams min. per contact

### Electrical Performance

**Current Rating:** 0.5 A DC

**Contact Resistance:** 40 milliohms (initial) D resistance £ 20 milliohms (final)

**Dielectric Strength:** 500 V AC for 1 minute

## PART NUMBER LEGEND

### 962-XX-50XGCXX-XX(XX)

#### PACKAGING

TR = Tape & Reel 56mm width, 16mm pitch tails down & marking up, see packaging ref. (offset board mounting style)

TL5 = Tape & Reel 56mm width, 16mm pitch tails up & marking up, see packaging ref. (centered board mounting style)

#### PLATING

23 = 30µin gold

27 = 15 µin gold

#### TAIL STYLE

19 = 19 tail style

22 = 22 tail style

45 = 45 tail style

46 = 46 tail style

48 = 48 tail style

49 = 49 tail style

51 = 51 tail style

#### NUMBER OF GROUND CLIPS

1 = ground clip at pos. #1 and #26

2 = ground clip at pos. #25 and #50

3 = ground clip at pos. #1, #25, #26 and #50

4 = ground clip at pos. #1 and #50

#### MOUNTING EAR STYLE

03 = 3 ear style

09 = 9 ear style

14 = 14 ear style

16 = 16 ear style

17 = 17 ear style

18 = 18 ear style



North and South America:

**Methode Electronics, Inc. Connector Products**

1700 Hicks Road • Rolling Meadows, IL 60008 USA

847-392-3500 • Toll Free: 800-323-6864 • Fax: 847-392-9404

Email: info@methode.com • Web: www.methode.com/connector/index.html

Europe:

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Email: info@methode.ie • Web: ireland.methode.com/main.html

Far East:

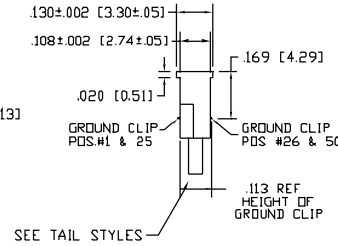
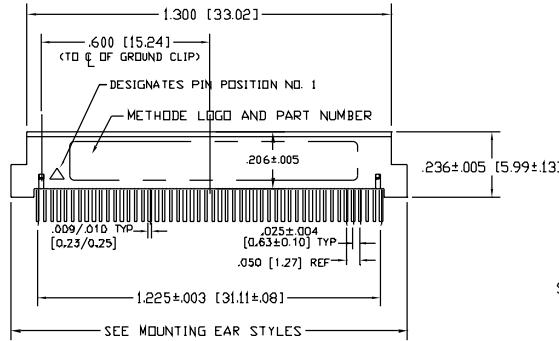
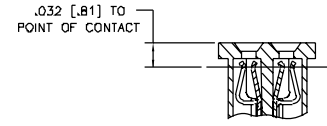
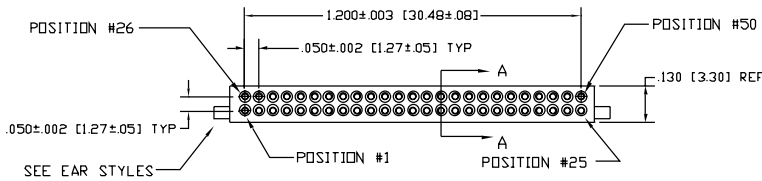
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65-68615444 • Fax: 65-68614777

Email: sales@methode.com.sg • Web: www.methode.com/mefe/index.html

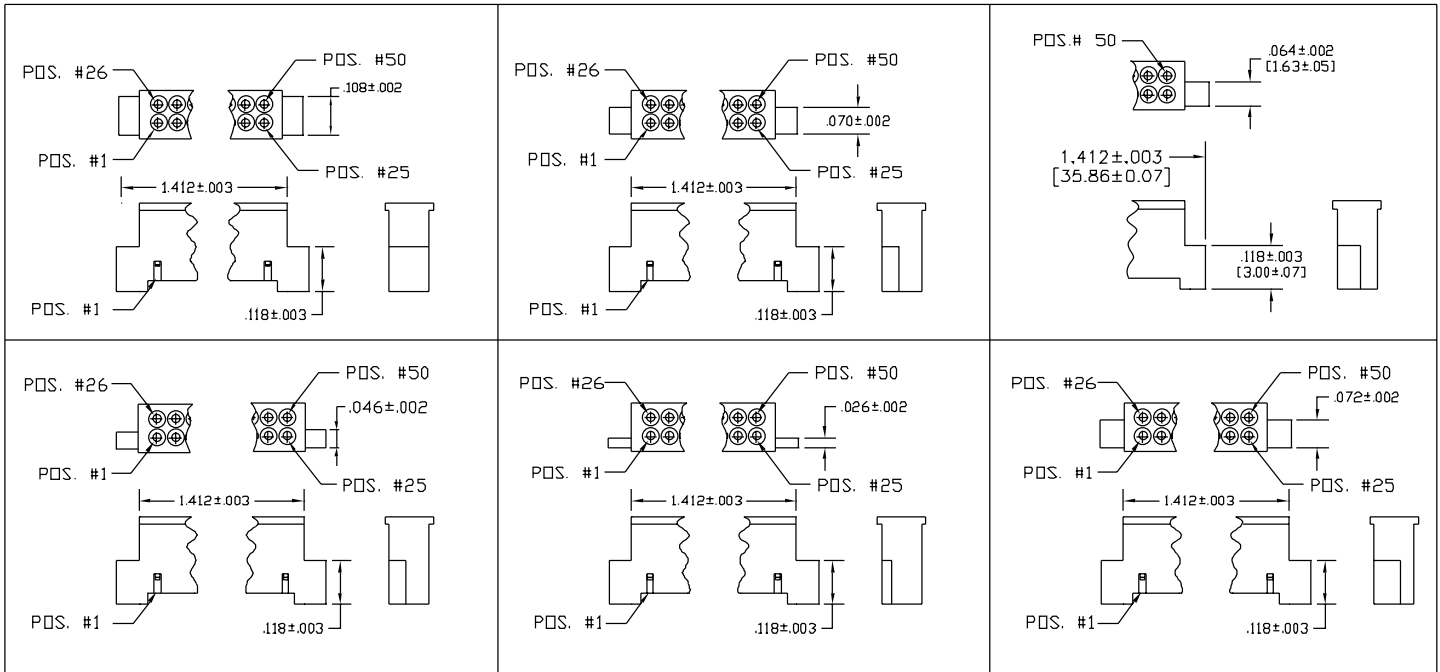
# 50 Position Compact Flash Receptacles with Ground Clip - 962 Series



03 MOUNTING EAR STYLE

09 MOUNTING EAR STYLE

17 MOUNTING EAR STYLE



14 MOUNTING EAR STYLE

16 MOUNTING EAR STYLE

18 MOUNTING EAR STYLE  
 (MEFE TOOLED)

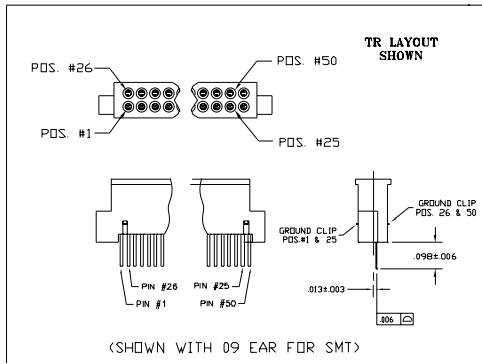


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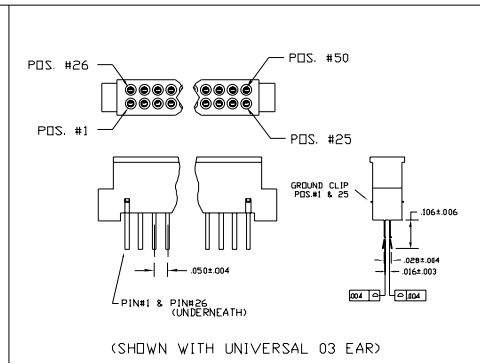
Europe:  
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 Email: info@methode.ie • Web: ireland.methode.com/main.html

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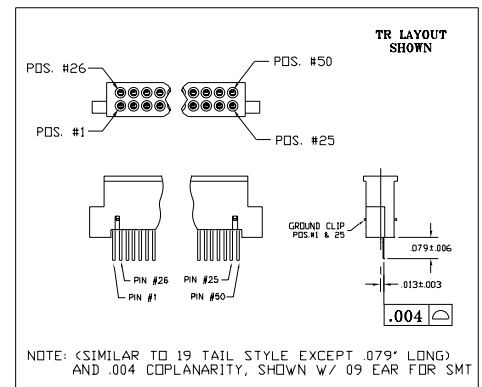
# 50 Position Compact Flash Receptacles with Ground Clip - 962 Series



**19 "TR" TAIL STYLE**  
SEE 19 TAIL BOARD LAYOUT

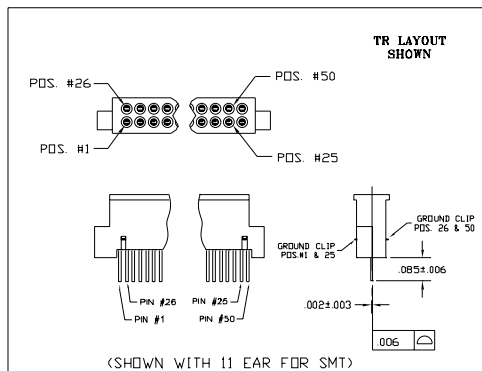


**22 TAIL STYLE**  
SEE BOARD LAYOUT-02

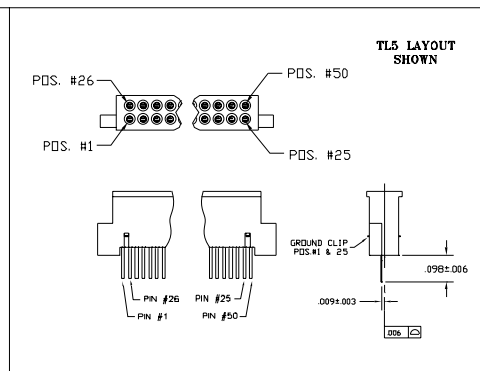


NOTE: (SIMILAR TO 19 TAIL STYLE EXCEPT .079" LONG) AND .004 COPLANARITY, SHOWN W/ .09 EAR FOR SMT

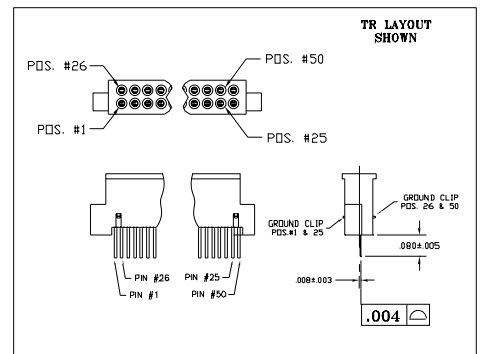
**48 TAIL STYLE**  
SEE 48 TAIL BOARD LAYOUT



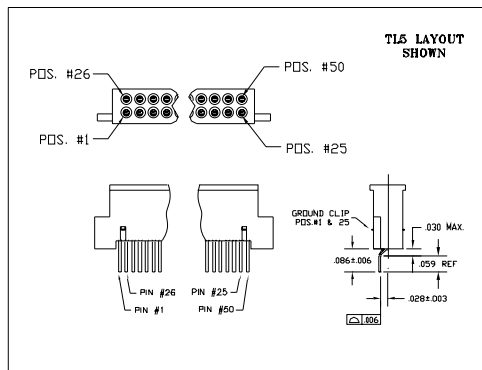
**44 TAIL STYLE**  
SEE 44 TAIL BOARD LAYOUT



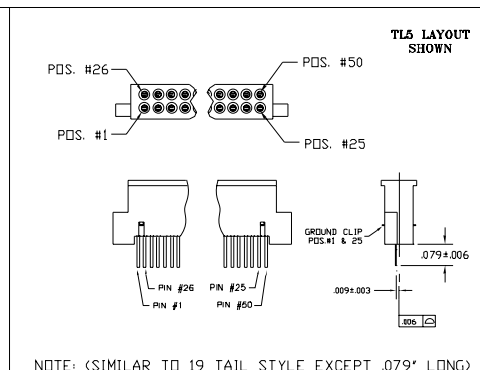
**19 "TL5" TAIL STYLE**  
SEE 19 TAIL BOARD LAYOUT



**49 TAIL STYLE**  
SEE 49 TAIL BOARD LAYOUT

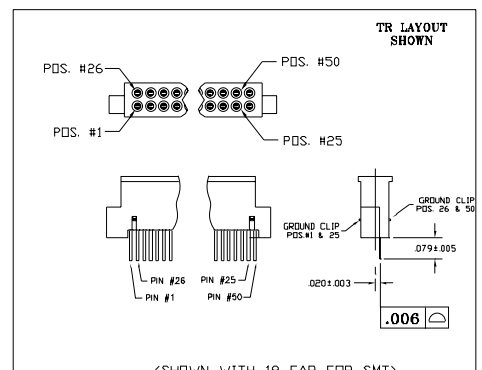


**45 TAIL STYLE**  
SEE 46 TAIL BOARD LAYOUT



NOTE: (SIMILAR TO 19 TAIL STYLE EXCEPT .079" LONG) ALSO SHOWN W/ 14 EAR FOR SMT

**46 TAIL STYLE**  
SEE 46 TAIL BOARD LAYOUT



**51 TAIL STYLE**  
SEE 51 TAIL BOARD LAYOUT  
(MIFE TOOLING)

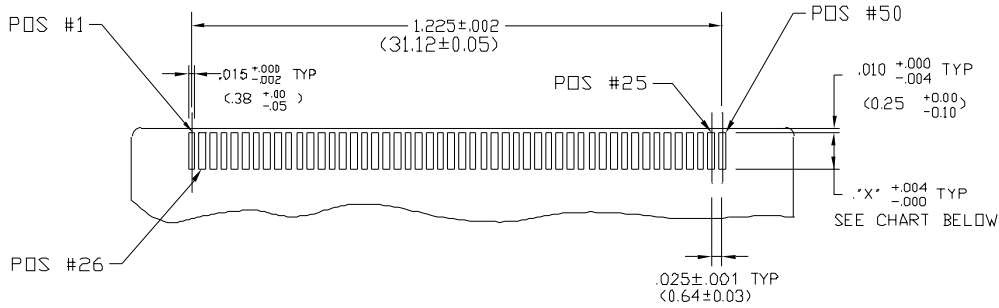


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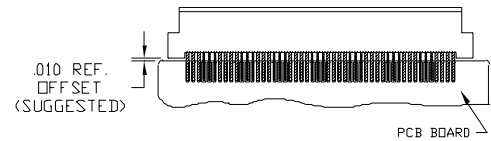
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Unit H, Crossagalla Business Park, Ballysimon Rd. • Limerick, Ireland  
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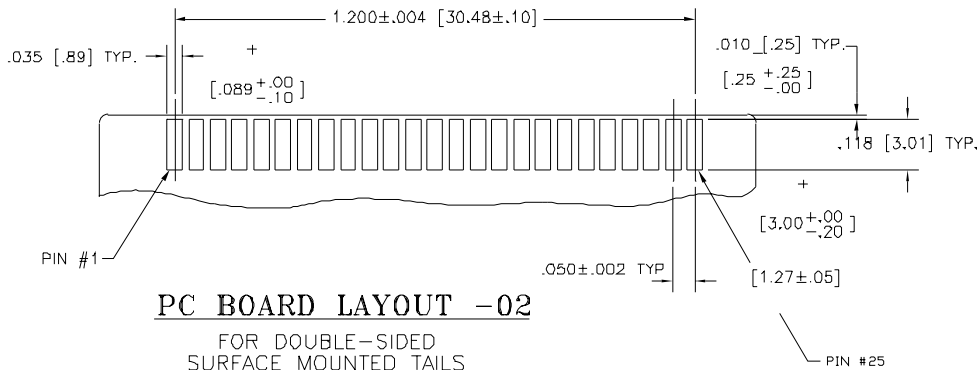
# 50 Position Compact Flash Receptacles with Ground Clip - 962 Series



TAIL STYLE	"X" LENGTH
"19 OR 44"	"0.096"
"45"	"0.060"
"46, 48"	"0.077"
"49, 51"	"0.077"



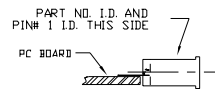
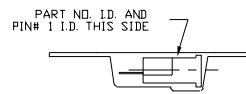
PC BOARD LAYOUT  
FOR SINGLE-SIDED  
IN-LINE SURFACE MOUNTED TAILS



PC BOARD LAYOUT -02  
FOR DOUBLE-SIDED  
SURFACE MOUNTED TAILS

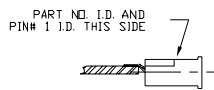
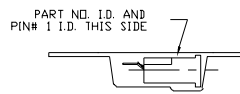
## PACKAGING SPEC REFERENCE

### "TR" PACKAGING OFFSET BOARD MOUNT



NOTE: CONTACT TAILS LIE  
BELOW CENTERLINE OF  
INSULATOR IN SIDE  
VIEW

### "TL5" PACKAGING CENTER BOARD MOUNT

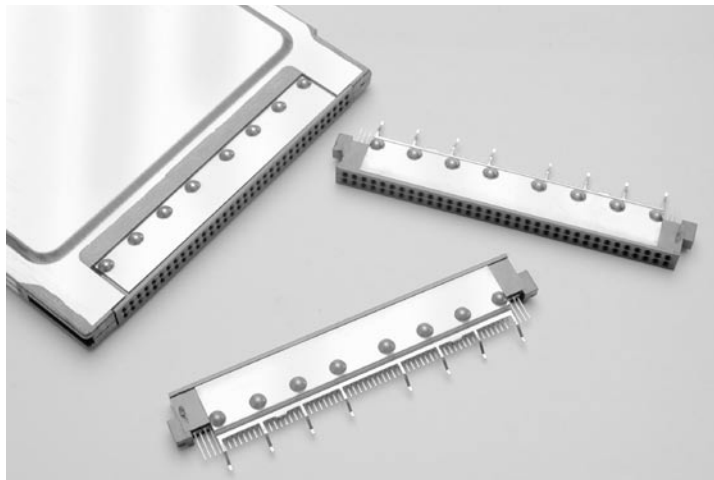


NOTE: CONTACT TAILS LIE  
ABOVE CENTERLINE OF  
INSULATOR IN SIDE  
VIEW





# 68 Position Cardbus Receptacle - 962 Series



- Cardbus Connector designed for use with Methode/Duel Welded Frame Kits
- Meets PC Card standards
- Durable contact design withstands repeated card insertions in excess of 10,000 cycles
- Flexible contact tail forming tool offers alternatives for custom applications
- Unique mold design offers flexibility to customize mounting ear configurations
- Materials are compatible with high temperature soldering processes
- Designed for use with Methode/Duel Systems and Sonic Welded Frame Kits

## Specifications

### Materials

**Contact Material:** High Performance Copper alloy

**Contact Plating:** 15 µin Select gold (30µin optional) in contact area over low stress nickel over all. 100 micro inch minimum 60/40 Sn/Pb in tail area.

**Cardbus Material:** Brass

**Cardbus Plating:** 3-5 µin select gold in contact area with 100/200 µin tin/lead on solder tails

**Insulator Material:** LCP 94V-0 rated high temperature thermoplastic

**Operating Temperature:** -55°C to +85°C

### Mechanical Performance

**Durability:** 10,000 cycles

**Insertion Force:** 6.0 lbs (2.7 Kg) max.

**Withdrawal Force:** 10 grams min. per contact

### Electrical Performance

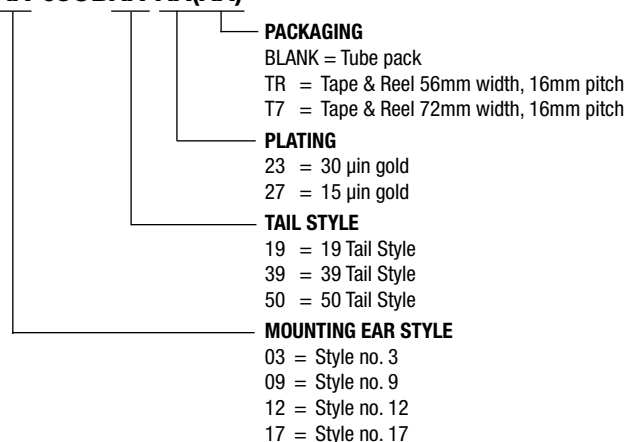
**Current Rating:** 0.5 A DC

**Contact Resistance:** 40 milliohms (initial) D resistance £ 20 milliohms (final)

**Dielectric Strength:** 500 V AC for 1 minute

### PART NUMBER LEGEND

#### 962-XX-68CBXX-XX(XX)



North and South America:

**Methode Electronics, Inc. Connector Products**

1700 Hicks Road • Rolling Meadows, IL 60008 USA

847-392-3500 • Toll Free: 800-323-6864 • Fax: 847-392-9404

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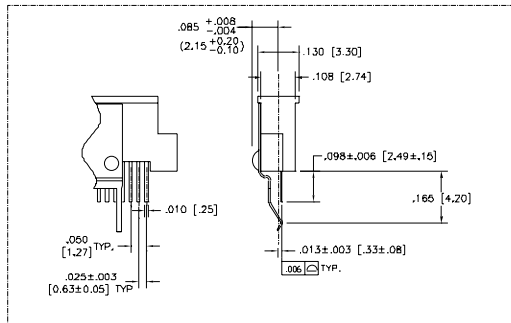
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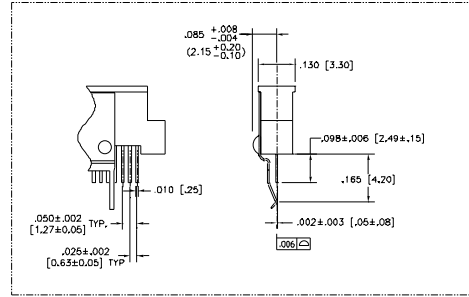
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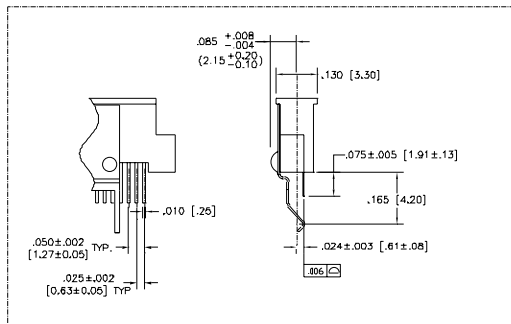
# 68 Position Cardbus Receptacle - 962 Series



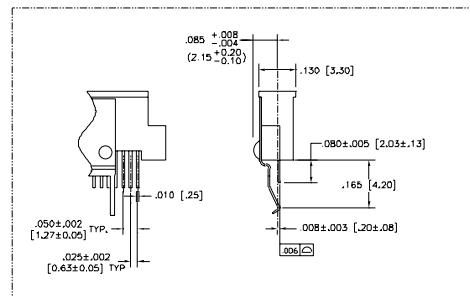
**19 TAIL STYLE** --SEE BOARD LAYOUT 01  
(MATES WITH 09 EAR STYLE)



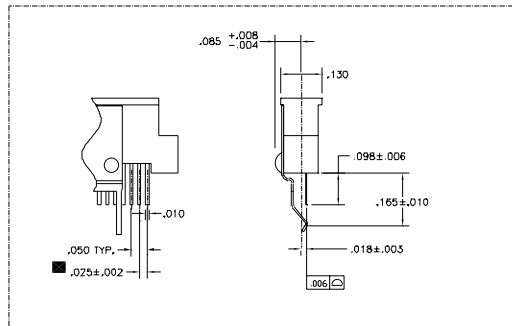
**44 TAIL STYLE** --PLEASE CONSULT FACTORY FOR AVAILABILITY  
--SEE BOARD LAYOUT 01  
(MATES WITH 15 EAR STYLE)



**50 TAIL STYLE** --PLEASE CONSULT FACTORY FOR AVAILABILITY  
--SEE BOARD LAYOUT 01  
(MATES WITH 12 EAR STYLE)

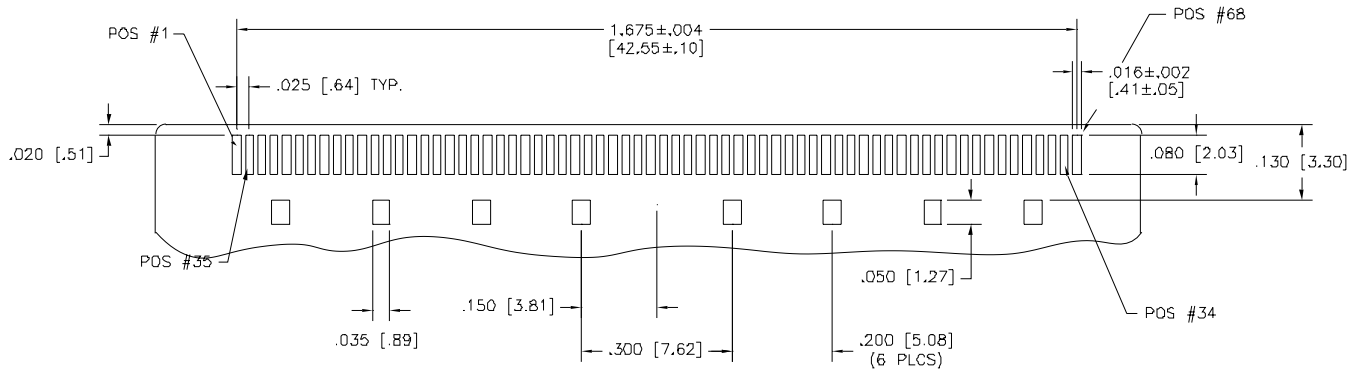


**49 TAIL STYLE** --PLEASE CONSULT FACTORY FOR AVAILABILITY  
--SEE BOARD LAYOUT 01  
(MATES WITH 17 EAR STYLE)

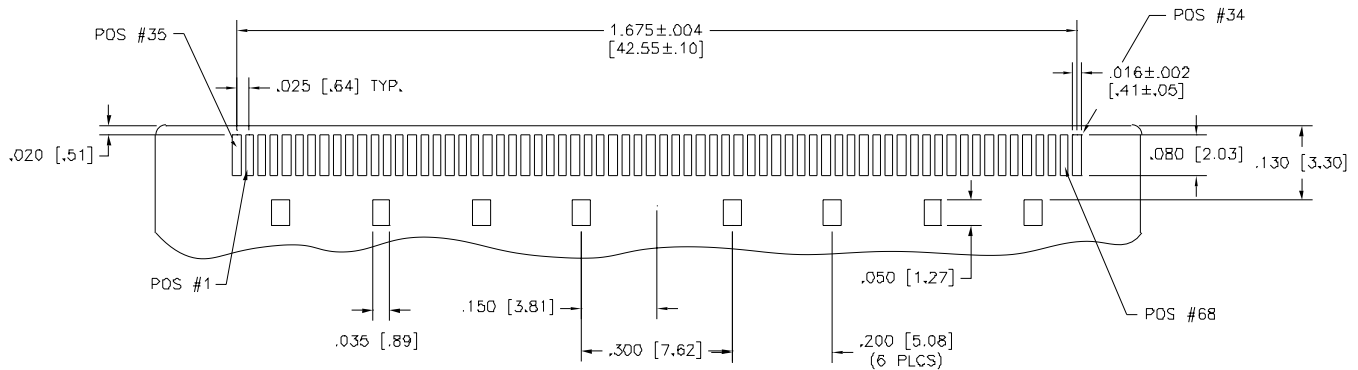


**39 TAIL STYLE** --PLEASE CONSULT FACTORY FOR AVAILABILITY  
--SEE BOARD LAYOUT 01

# 68 Position Cardbus Receptacle - 962 Series



PC BOARD LAYOUT-01



PC BOARD LAYOUT-02



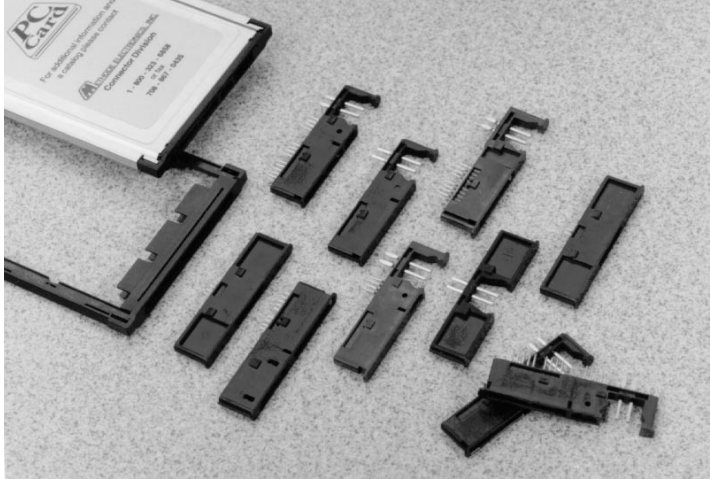
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# Type II I/O Headers 852/853 Series



## Specifications

### Materials

**Contact Material:** Copper alloy

**Insulator Material:**

1 = Liquid crystal polymer (LCP)

2 = Polyphenylene oxide (PPO)

3 = Polycarbonate (PC)

**Processing Temperature:** LCP recommended for hot bar solder processing

**Operating Temperature:** -55°C to +85°C

**Plating:**

90 = Select gold flash over palladium nickel in mating area with tin/lead in solder area

23 = Select gold in mating area with tin/lead in solder area

## Features and Benefits

- Single, dual or tri-port modular options offer multiple I/O functions
- Snap-in attachment to back end of card frame provides easy assembly
- Simple and proven contact design for consistent performance

## Mechanical Performance

**Durability:** 10,000 mating cycles

**Vibration:** Per MIL-STD-202F, Method 204D

**Shock:** Per MIL-STD-202F, Method 213B

## Electrical Performance

**Current Rating:** 0.5 A DC

2 Pin Header: 3.0 A DC

**Contract Resistance:** 40 milliohms (initial)

Δ resistance ≤ 20 milliohms (final)

## MEMORY CARD I/O HEADERS PART NUMBER DESCRIPTION

85X - XX - XXXXX - XX

### SERIES NUMBER

- 2 = UNIVERSAL I/O PORT
- 3 = CUSTOM I/O PORT

### NUMBER OF CABLE PORTS

- 1 = 2 POSITION (CENTERED)
- = 2 POSITION (OFFSET)
- = 4 POSITION
- 2 = 2 AND 4 POSITIONS
- = 2 AND 9 POSITIONS
- = 4 AND 4 POSITIONS
- = 4 AND 9 POSITIONS
- 3 = 2, 4, AND 9 POSITIONS

### INSULATOR MATERIAL

- 1 = LCP
- 2 = PPO
- 3 = PC

### PLATING

- 23 = 2 POSITION PORT PRESENT
- 90 = WITHOUT 2 POSITION PORT

### PCB OFFSET

- 097 = STANDARD (.097)

### NUMBER OF CONTACT HOLES

- 02 = 2 POSITION (CENTERED AND OFFSET)
- 04 = 4 POSITION
- 06 = 2 AND 4 POSITIONS
- 08 = DUAL 4 POSITIONS
- 11 = 2 AND 9 POSITIONS
- 13 = 4 AND 9 POSITIONS
- 15 = 2, 4, AND 9 POSITIONS



North and South America:

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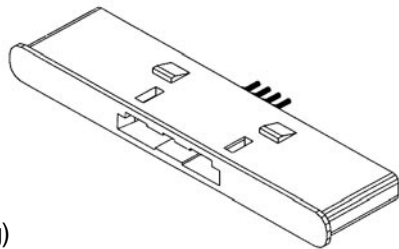
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# Type II I/O Headers 852/853 Series

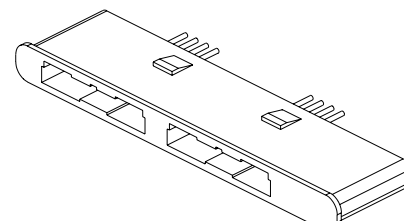
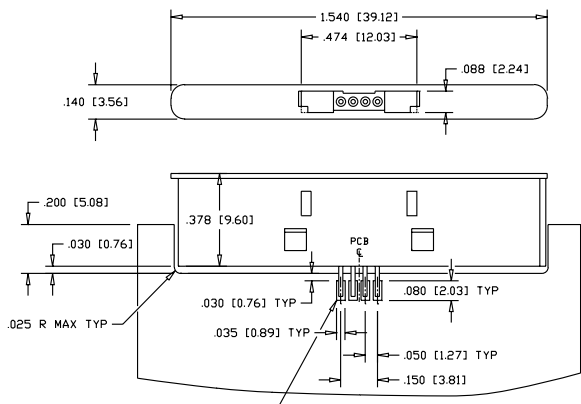


## 4 Pin Header (Tip & Ring)

852-1X-04097-90

### INSULATOR MATERIAL

- 1 = LCP
- 2 = PPO
- 3 = PC

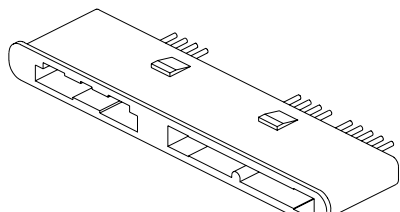
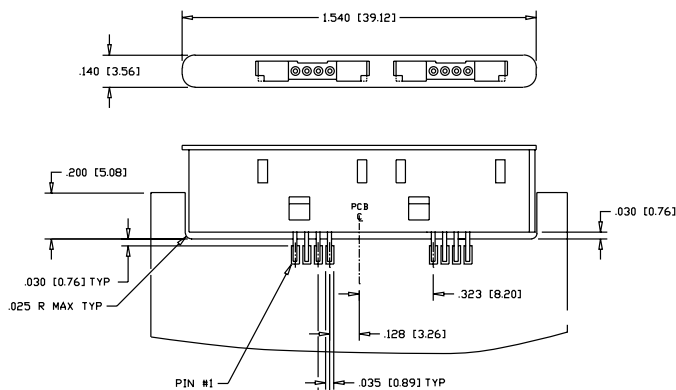


## Dual 4 Pin Header

852-2X-08097-90

### INSULATOR MATERIAL

- 1 = LCP
- 2 = PPO
- 3 = PC

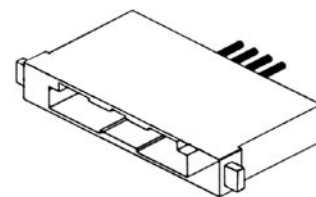
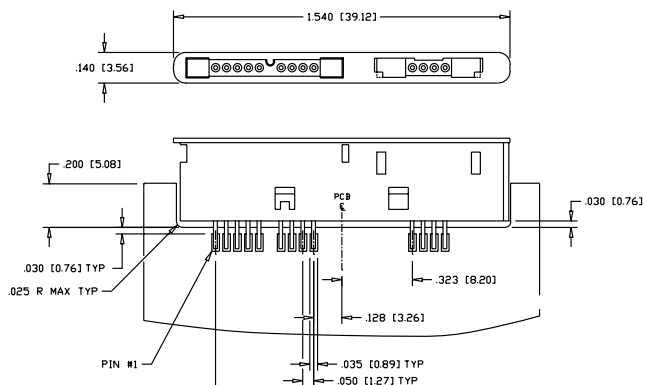


## 4 and 9 Pin Header

852-2X-13097-90

### INSULATOR MATERIAL

- 1 = LCP
- 2 = PPO
- 3 = PC

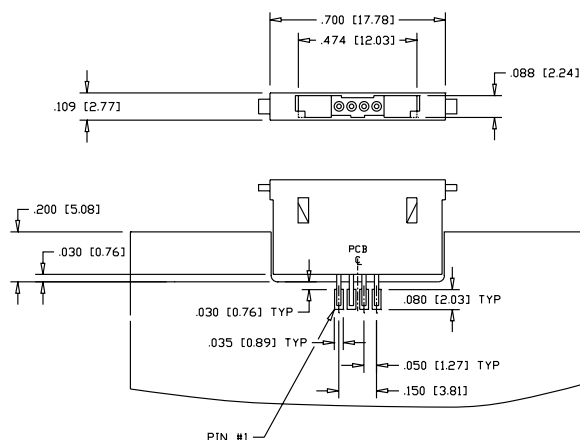


## 4 Pin Header

853-1X-04097-90

### INSULATOR MATERIAL

- 1 = LCP
- 2 = PPO
- 3 = PC



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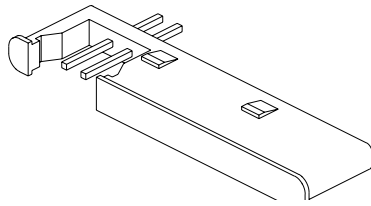
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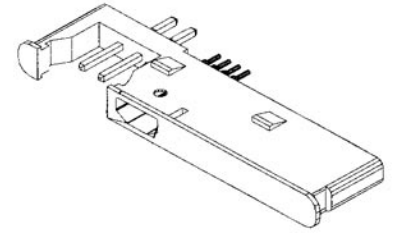
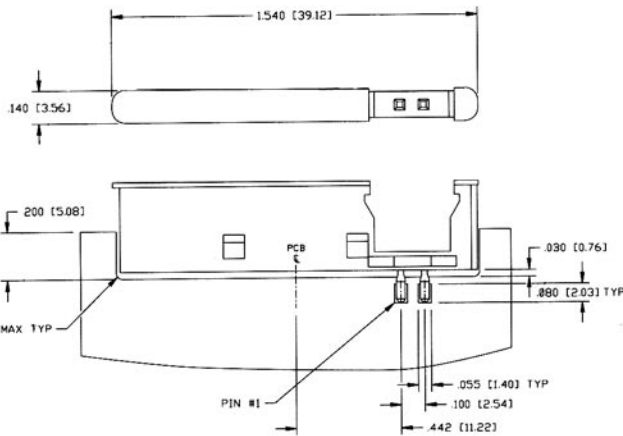
# Type II I/O Headers 852/853 Series



## 2 Pin Header

852-1X-02197-23

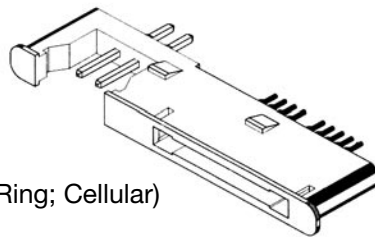
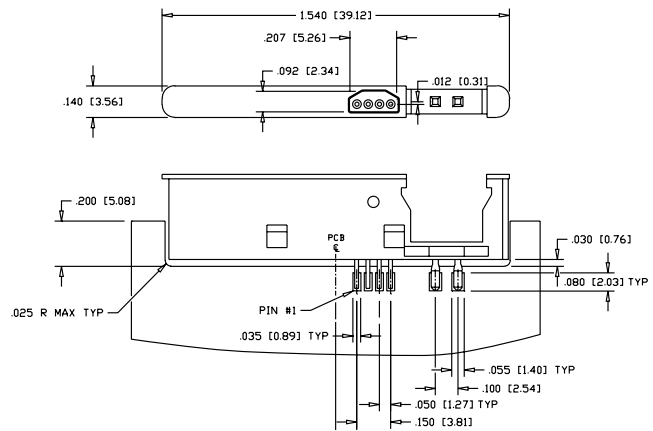
- INSULATOR MATERIAL
- 1 = LCP
- 2 = PPO



## 2 and 4 Pin Header (T)

852-2X-06097-23

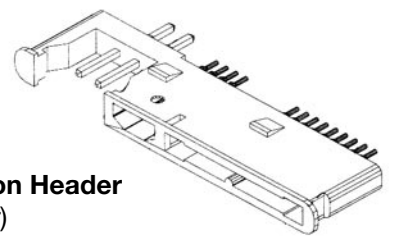
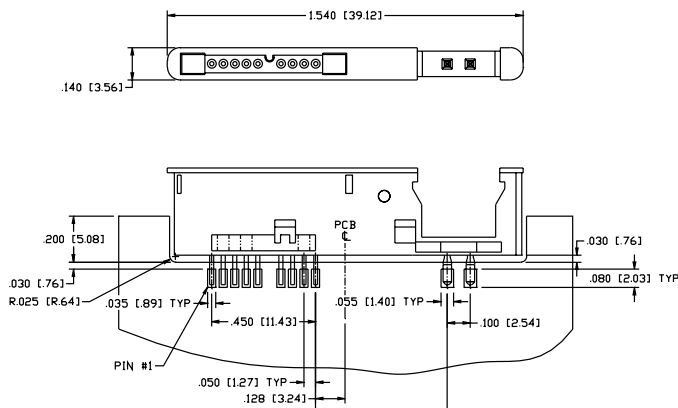
- INSULATOR MATERIAL
- 1 = LCP
- 2 = PPO



## 2 and 9 Pin Header (Tip & Ring; Cellular)

852-2X-11097-23

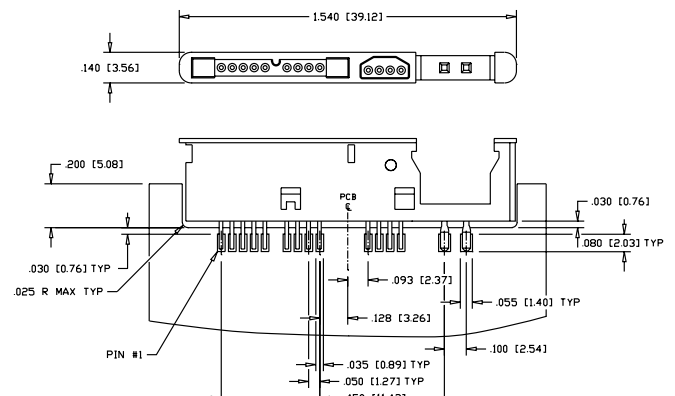
- INSULATOR MATERIAL
- 1 = LCP
- 2 = PPO



## 2, 4 and 9 Pin Combination Header (Tip & Ring; Audio; Cellular)

852-3X-15097-23

- INSULATOR MATERIAL
- 1 = LCP
- 2 = PPO



North and South America:

**Methode Electronics, Inc. Connector Products**

1700 Hicks Road • Rolling Meadows, IL 60008 USA

847-392-3500 • Toll Free: 800-323-6864 • Fax: 847-392-9404

Email: info@methode.com • Web: www.methode.com/connector/index.html

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+353 (0) 61 401222 • Fax: +353 (0) 61 401942

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1 Tuas Lane, Jurong Town • Singapore 638610

65-68615444 • Fax: 65-68614777

Email: sales@methode.com.sg • Web: www.methode.com/mefe/index.html



# PC Card I/O Cables 860 Series



## Features and Benefits

- Dedicated cables for specific I/O applications
- Simple and proven contact design for consistent per

## Specifications

### Materials

**Contact Material:** Copper alloy

**Insulator Material:** 94V-0 rated thermoplastic

**Operating Temperature:** -55°C to +85°C

### Plating:

All other Cables = Select gold flash over palladium nickel in mating area with tin/lead in solder area (if applicable)

2 Position Only = Select gold in mating area with tin/lead in solder area (if applicable)

### Mechanical Performance

**Durability:** 10,000 mating cycles

**Vibration:** Per MIL-STD-202F, Method 204D

**Shock:** Per MIL-STD-202F, Method 213B

**Pull Strength:** 11.2 lbs (50 N) min

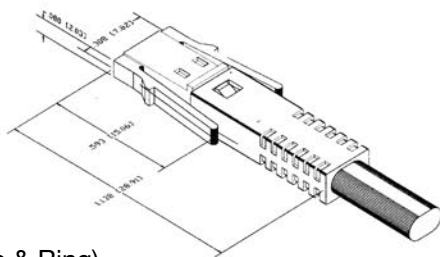
### Electrical Performance

**Current Rating:** 0.5 A DC

2 Pin Position Cable: 3.0 A DC

**Contract Resistance:** 40 milliohms (initial)  
 $\Delta$  resistance  $\leq$  20 milliohms (final)

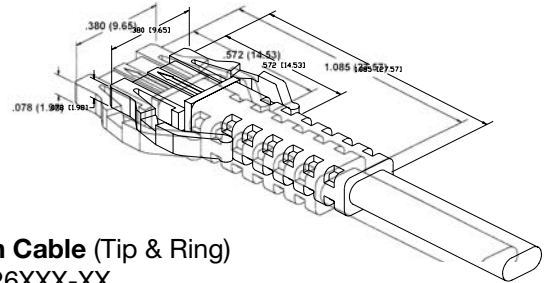
**Dielectric Strength:** 500 V AC for 1 minute



### 2 Position Cable (Tip & Ring)

860-102-26XXX-XX

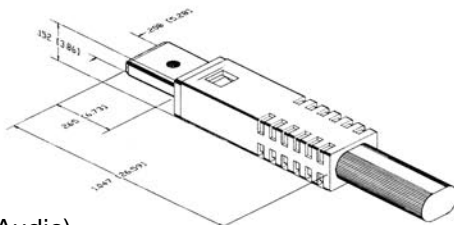
**TERMINATION**  
00 = UNTERMINATED  
01 = RJ11 TERMINATION  
**LENGTH IN INCHES**  
084 = 84" (STANDARD)



### 4 Position Cable (Tip & Ring)

860-104-26XXX-XX

**TERMINATION**  
00 = UNTERMINATED  
01 = RJ11 TERMINATION  
**LENGTH IN INCHES**  
072 = 72" (STANDARD)



### 4 Position Cable (Audio)

860-X04-26XXX-XX

**TERMINATION**  
00 = UNTERMINATED  
**LENGTH IN INCHES**  
72 = 72" (STANDARD)  
**CABLE COLOR**  
2 = BLACK  
4 = GRAY



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Far East:

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1 Tuas Lane, Jurong Town • Singapore 638610

65-68615444 • Fax: 65-68614777

Email: sales@methode.com.sg • Web: www.methode.com/mefe/index.html



# 68 Pin PCMCIA Right Angle Type I, II and III PC Board Headers (Host Receptacles) - 940 Series



## Specifications

### Materials

**Contact Material:** Copper alloy

**Contact Plating:** 30 microinches gold on contact area over 50 microinches of low stress nickel overall, 100 microinches 60/40 SN/Pb in tail area.

**Insulator Material:** Thermoplastic 94V-0 rated

**Operating Temperature:** -55°C to +85°C

### Mechanical Performance

**Durability:** 10,000 cycles

**Insertion Force:** 8.8 lbs (4 Kg) max.

**Withdrawal Force:** 1.5 lbs (.68 Kg) min.

### Electrical Performance

**Current Rating:** 0.5 ADC

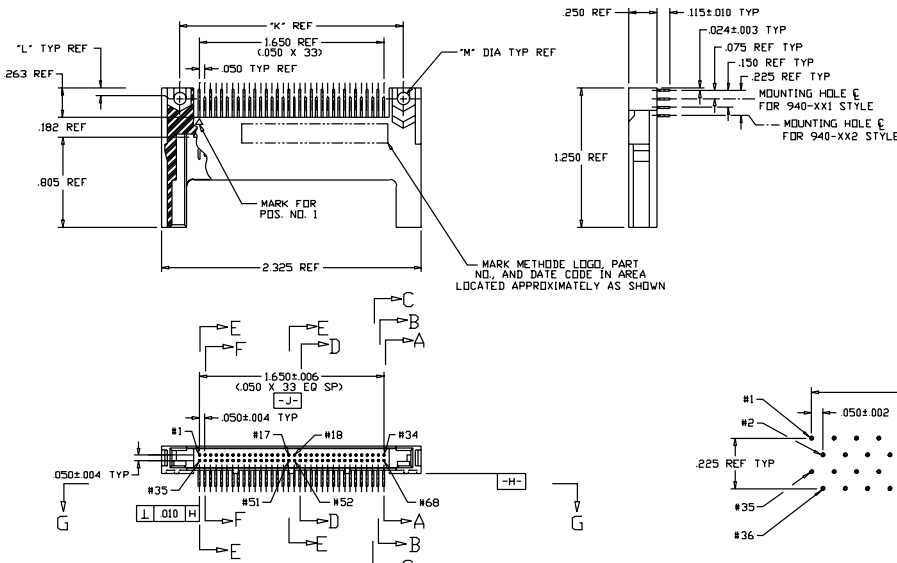
**Contact Resistance:** 40 milliohms (initial)  
Δ resistance ≤ 20 milliohms (final)

**Dielectric Strength:** 500 VAC for 1 minute

Methode's 68 pin headers are PCMCIA compatible and are available in straight, right angle and stacked configurations.

- Meets PCMCIA and JEIDA standards
- Low profile insulator design
- Right angle tail design
- High temperature materials are compatible with vapor phase soldering techniques

## Series 940 Right Angle Type III



**Other styles and custom variations also available. Contact Factory.**

MOUNTING HOLE STYLES			
PART NUMBER	DIM "K"	DIM "L"	DIM "M"
940-121-68RA01-23	2.000	.024	0.110
940-122-68RA01-23	1.975	.225	0.126

PIN LENGTH CHART		
PIN TYPE	PIN LENGTH	PIN NUMBER
1	0.138	36, 37
2	0.167	ALL OTHER PINS
3	0.197	1, 17, 34, 35, 51, 68



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Far East:

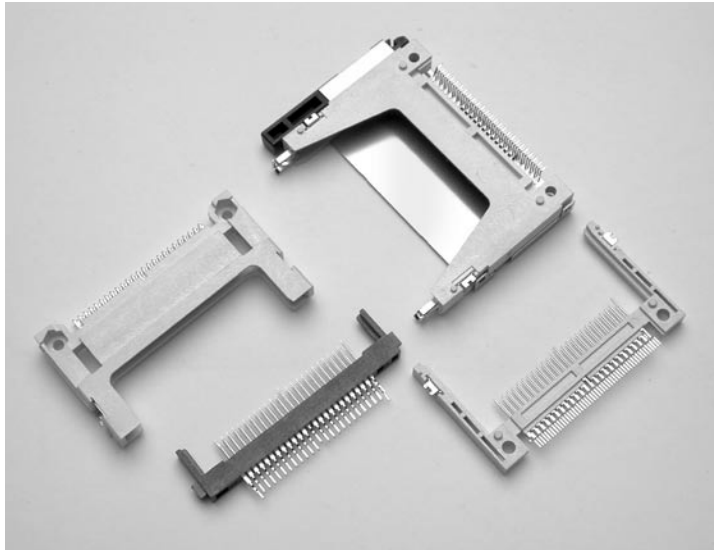
Methode Electronics Far East, Pte. Ltd.

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65-68615444 • Fax: 65-68614777

Email: sales@methode.com.sg • Web: www.methode.com/mefe/index.html

# 50 Position Compact Flash Right Angle PC Board Headers (Host Receptacles)



A wide variety of standard compact flash board host receptacles are available. **Consult Factory.**

- Standard and Slim (low profile) heights
- 1.2mm and 2.2 mm standoffs
- Extended Grounding Legs
- Reverse Mount
- Ejectors with stainless steel shells



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