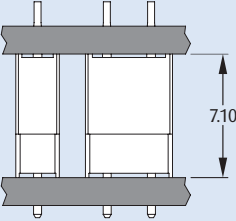
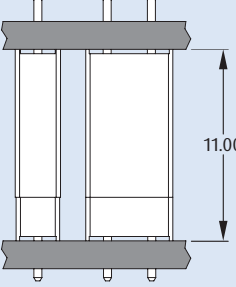
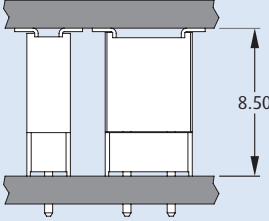
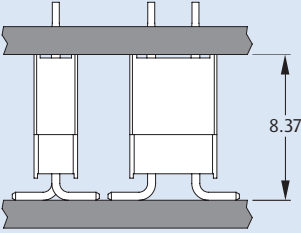
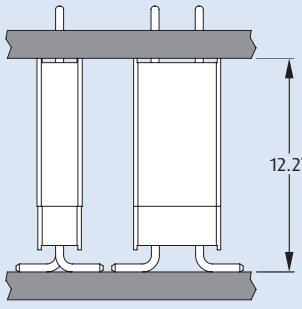
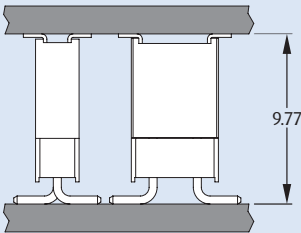


Archer Connectors – M52 Specification

- 1.27mm x 2.54mm pitch male pin headers (with 0.46mm square pins) and female sockets, for vertical board-to-board connection.

Materials		Mechanical	
Housings:	High Temperature Plastic UL94V-0	Durability:	300 operations
Contacts:	Copper Alloy	Insertion force (max)	
Finish:	Gold	M52-500, 510:	1.0N per contact
		Others:	1.5N per contact
		Withdrawal force (min)	
		M52-500, 510:	0.12N per contact
		Others:	0.1N per contact
		Vibration sensitivity:	50-2,000Hz, 3.13G, 45 minutes duration
		Shock severity:	294m/s ² (30G) for 11ms
Electrical		Environmental	
Current:	1A per contact	Operating temperature:	-40°C to +105°C
Voltage proof:	500V AC, 1,000V DC for 1 minute	Solderability:	245°C for 5 seconds
Contact resistance:	30mΩ max	Soldering heat resistance:	260°C for 5 seconds
Insulation resistance:	1,000MΩ min		

Mating Profiles

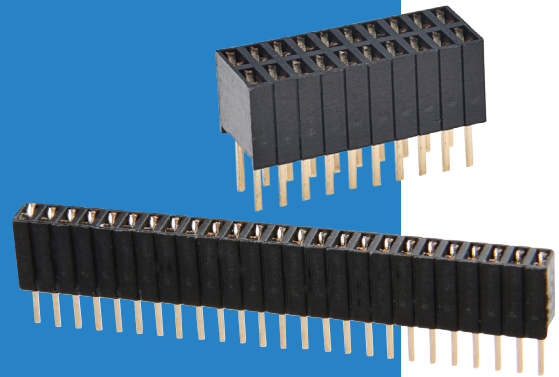
		FEMALE		
		VERTICAL THROUGHBOARD (4.6mm Height)	VERTICAL THROUGHBOARD (8.5mm Height)	VERTICAL SMT
MALE	VERTICAL THROUGH-BOARD			
	VERTICAL SMT			

All dimensions in mm.

Archer Connectors – M52

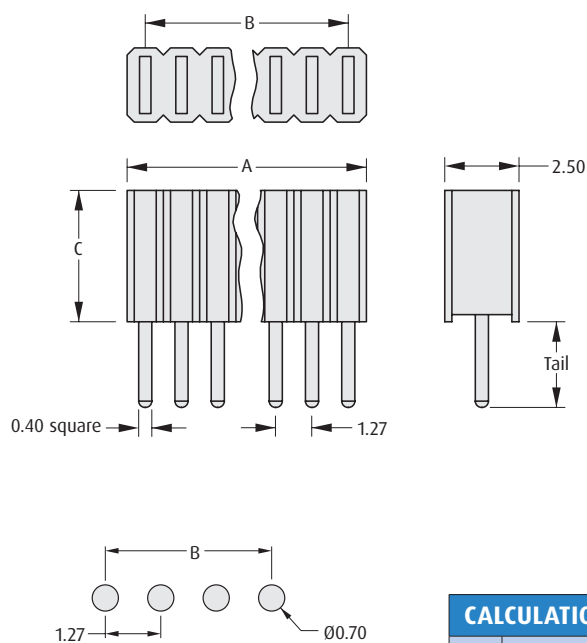
Female Vertical Throughboard

- ❖ Choice of connector height.
- ❖ Suitable for use with male connectors with 0.46mm square pins.



1.27mm (.050") PITCH

SINGLE ROW

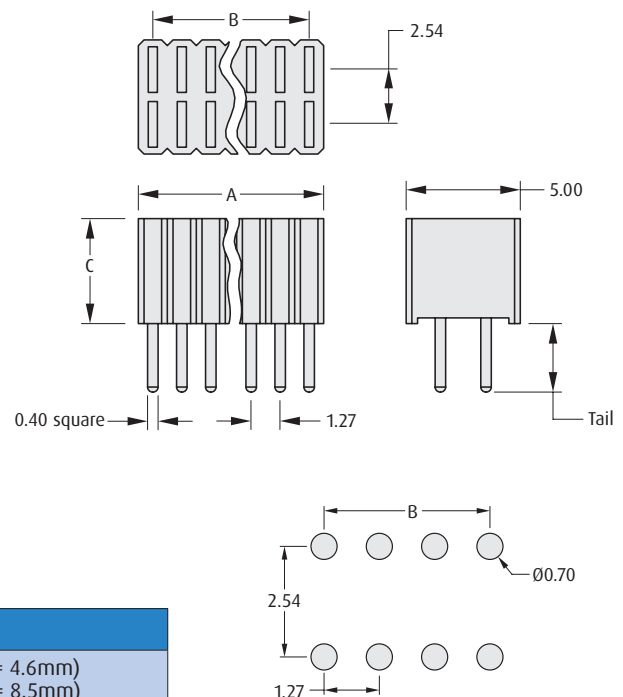


Recommended PC Board Pattern

CALCULATION

A	B + 1.67 (when C = 4.6mm) B + 1.27 (when C = 8.5mm)
B	1.27 x (No. of contacts per row - 1)

DOUBLE ROW



Recommended PC Board Pattern

HOW TO ORDER

M52 - 5 X X XX 45

SERIES CODE

NO. OF ROWS

0	Single Row
1	Double Row

HEIGHT

0	C = 4.6mm, Tail = 3.00mm
1	C = 8.5mm, Tail = 2.80mm

FINISH

45	Gold
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NO. OF CONTACTS PER ROW

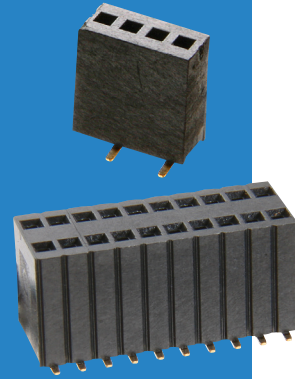
03 to 10, 12, 14 to 16, 20, 25, 40	Single, 4.6mm
03 to 10, 12, 15, 20, 23, 25	Single, 8.5mm
03 to 10, 12, 15, 20, 25, 30, 40	Double 4.6mm
03 to 10, 12, 15, 20, 23, 25	Double, 8.5mm

All dimensions in mm.

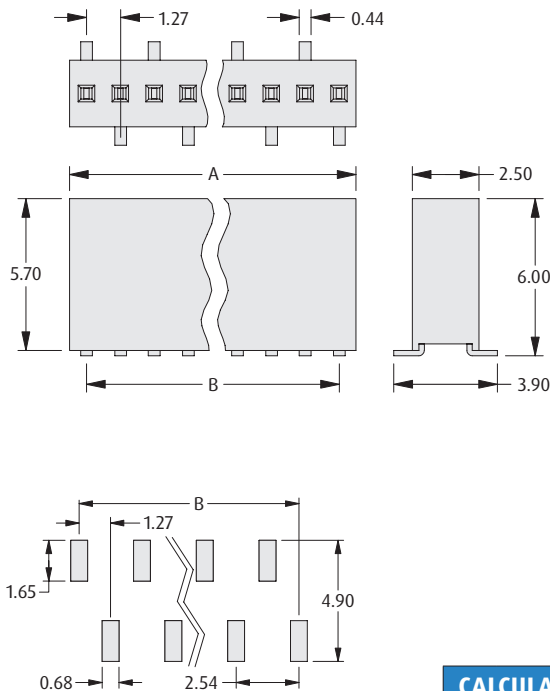
Archer Connectors – M52

Female Vertical Surface Mount

- Suitable for use with male pin headers with 0.46mm square pins.
- Twin beam contact for cost-effective reliability.



SINGLE ROW

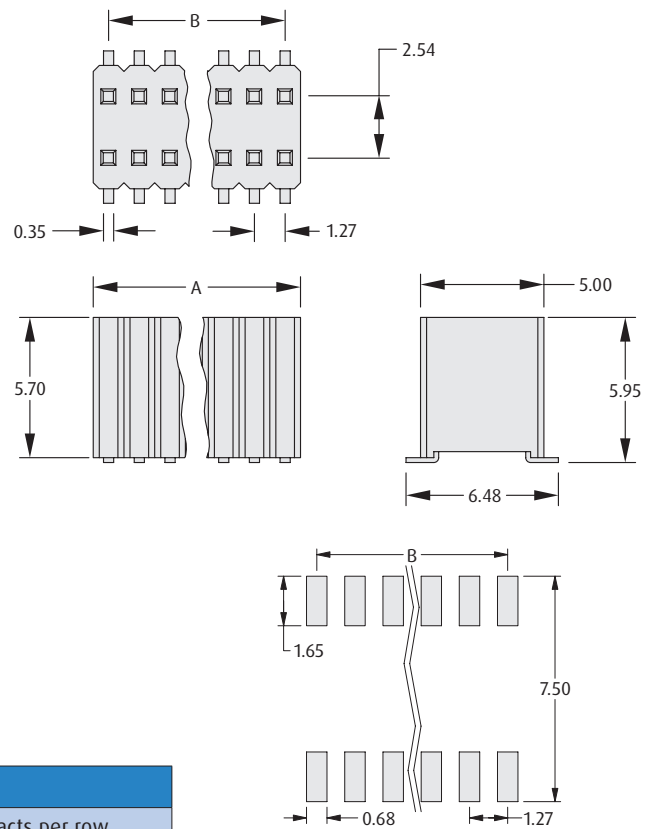


Recommended PC Board Pattern

CALCULATION

A	1.27 x No. of contacts per row
B	1.27 x (No. of contacts per row - 1)

DOUBLE ROW



Recommended PC Board Pattern

HOW TO ORDER

M52 - 5 X 5 XX 45

SERIES CODE

TYPE

0	Single Row
1	Double Row

FINISH

45	Gold
-----------	------

NO. OF CONTACTS PER ROW

03 to 10, 12, 15, 20, 25

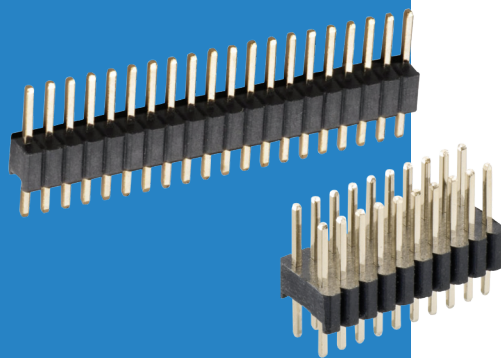
All dimensions in mm.

Archer Connectors – M52

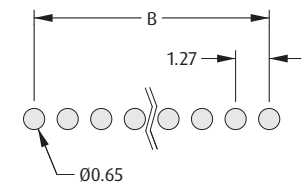
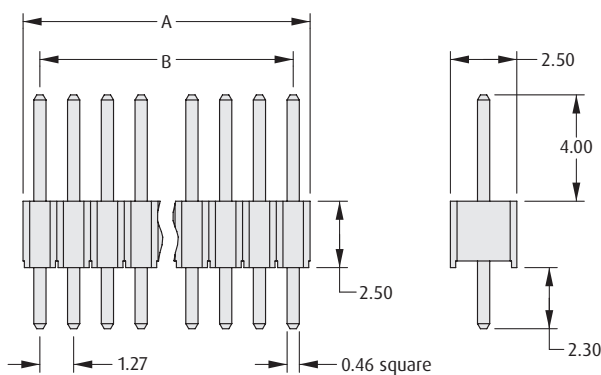
1.27mm (.050") PITCH

Male Vertical Throughboard

- Suitable for use with female connectors shown on previous page.



SINGLE ROW

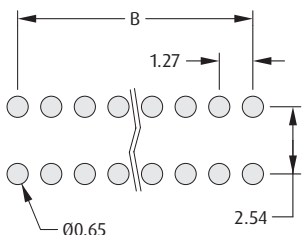
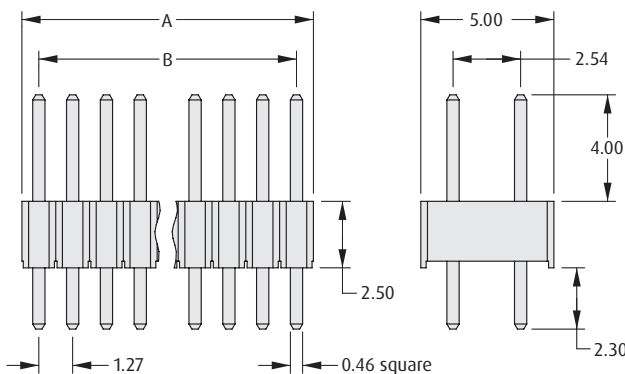


Recommended PC Board Pattern

CALCULATION

A	1.27 x No. of contacts per row
B	1.27 x (No. of contacts per row - 1)

DOUBLE ROW



Recommended PC Board Pattern

HOW TO ORDER

M52 - 040023 X XX 45

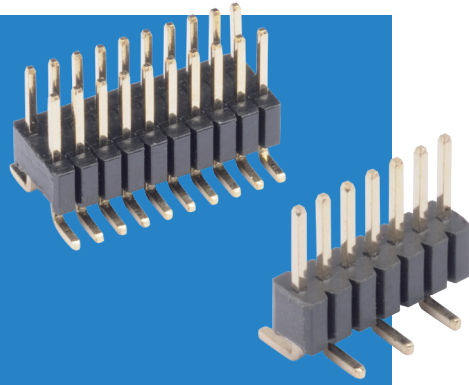
SERIES CODE		FINISH	
TYPE		45	Gold
V	Single Row		
W	Double Row		
		NO. OF CONTACTS PER ROW	
		05, 10, 20, 25	

All dimensions in mm.

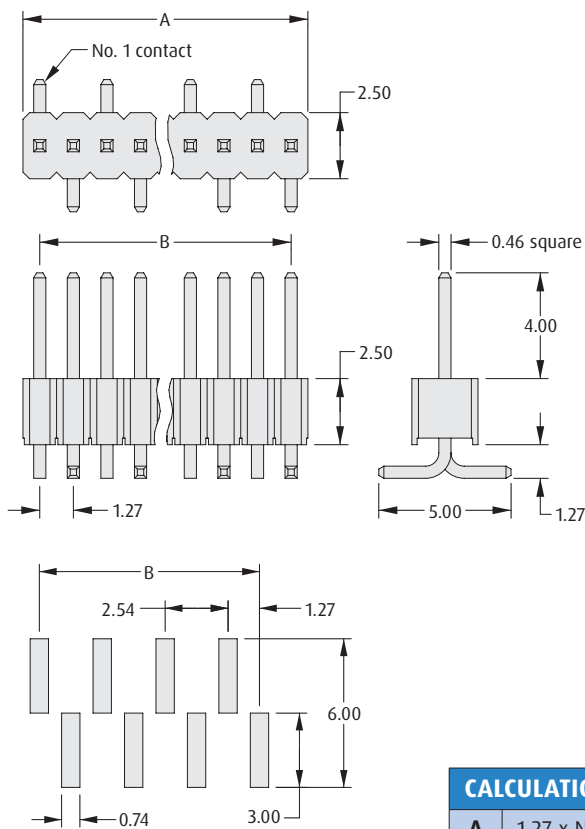
Archer Connectors – M52

Male Vertical Surface Mount

- Suitable for use with female connectors shown on previous page.



SINGLE ROW

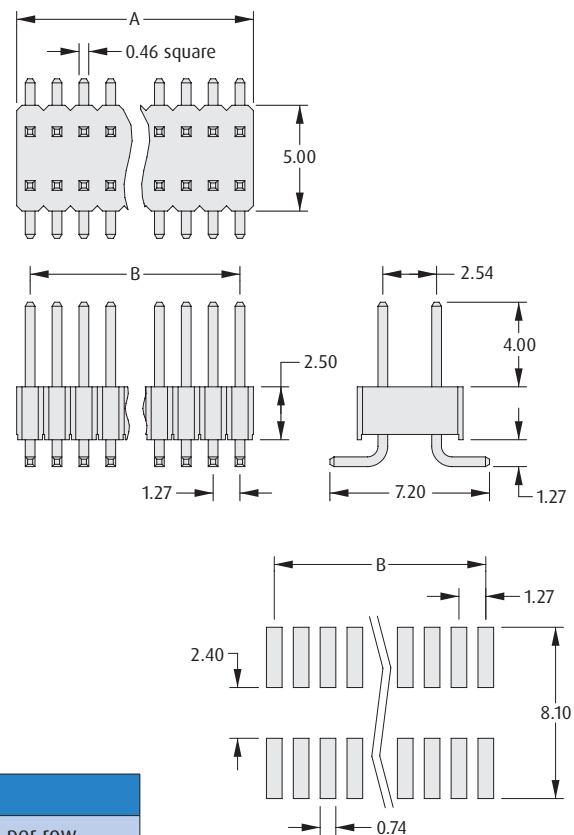


Recommended PC Board Pattern

CALCULATION

A	$1.27 \times \text{No. of contacts per row}$
B	$1.27 \times (\text{No. of contacts per row} - 1)$

DOUBLE ROW



Recommended PC Board Pattern

HOW TO ORDER

M52 - 040000 X XX 45

SERIES CODE

TYPE

P	Single Row
S	Double Row

FINISH

45	Gold
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NO. OF CONTACTS PER ROW

05, 10, 20, 25

All dimensions in mm.