

M40-600/620 Connectors Specification

Materials

Mouldings:	High Temp Thermoplastic, UL94V-0
Contacts:	Phosphor Bronze
Finish:	Tin

Electrical

Current rating:	0.5A per contact
Voltage rating:	150V AC
Voltage proof:	250V AC
Contact resistance:	50 mΩ max
Insulation resistance:	500 MΩ min

Environmental

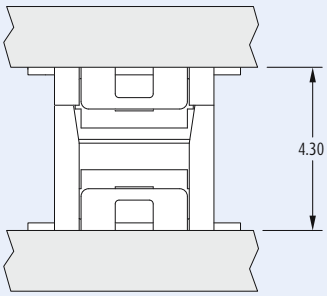
Operating temperature:	-20°C to +125°C
Solderability:	210°C for 5 seconds
Soldering heat resistance:	260°C for 10 seconds

Mechanical

Durability:	30 operations
Insertion force (max):	2.7N per contact
Withdrawal force (min):	0.4N per contact

All preferred sizes of this range are held in stock.
Check www.harwin.com for availability.

Mating Profiles

FEMALE MALE	M40-620
M40-600	

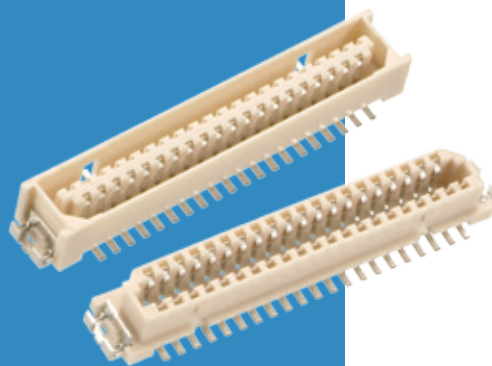
All dimensions in mm.

M40 Connectors

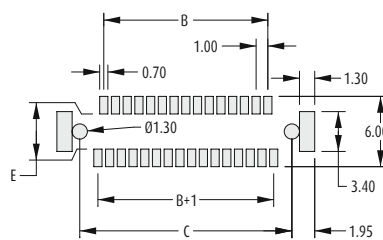
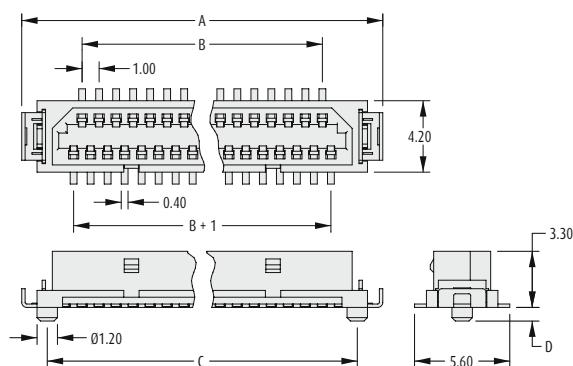
Vertical Surface Mount

A range of double row 1.00mm pitch SMT male and female connectors for board-to-board stacking.

- ❖ Locating pegs to ensure correct positioning onto the board.
- ❖ Polarised to prevent mis-mating.
- ❖ Staggered pin-out to help board layout.



FEMALE

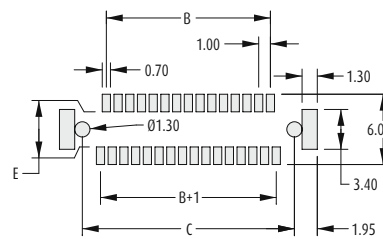
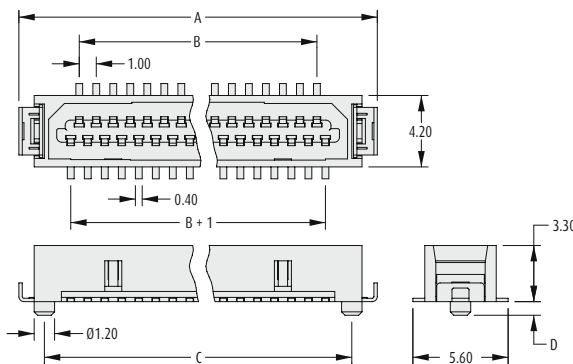


Recommended PC Board Pattern

CALCULATION

A	$B + 7.1$
B	$(\text{Total No. Of Contacts} - 3) / 2$
C	$B + 4.1$
D	1.0mm for 9, 15, 21, 25 way; otherwise 0.80mm
E	1.84mm for 9, 15, 21, 25 way; otherwise 3.00mm

MALE



Recommended PC Board Pattern

HOW TO ORDER

M40 - 6 X 0 XX XX X

SERIES CODE

GENDER

0	Male
2	Female

PACKAGING

Blank	Loose
R	Tape & Reeled

FINISH

46	Tin	PG
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TOTAL NO. OF CONTACTS

09, 15, 21, 25, 31, 41, 51

All dimensions in mm.

M40-310/320 Connectors Specification

Materials

Mouldings:	High Temp Thermoplastic, UL94V-0
Contacts:	Male: Brass Female: Phosphor Bronze
Finish:	Gold

Electrical

Current rating:	1.0A per contact
Voltage proof:	500V AC
Contact resistance:	30 mΩ max
Insulation resistance:	1,000 MΩ min

Environmental

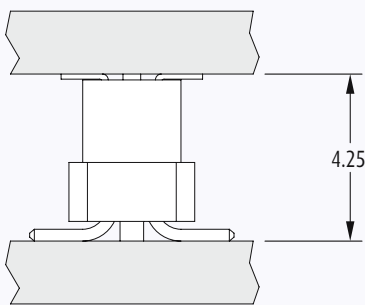
Operating temperature:	-40°C to +105°C
Solderability:	245°C for 5 seconds
Soldering heat resistance:	260°C for 10 seconds

Mechanical

Durability:	300 operations
Insertion force (max.):	1.5N per contact
Withdrawal force (min.):	0.1N per contact
Vibration sensitivity:	50 – 2000Hz, 45 minutes duration
Shock severity:	294m/s ² (30G) for 11ms

All preferred sizes of this range are held in stock.
Check www.harwin.com for availability.

Mating Profiles

FEMALE MALE	M40-310
M40-320	

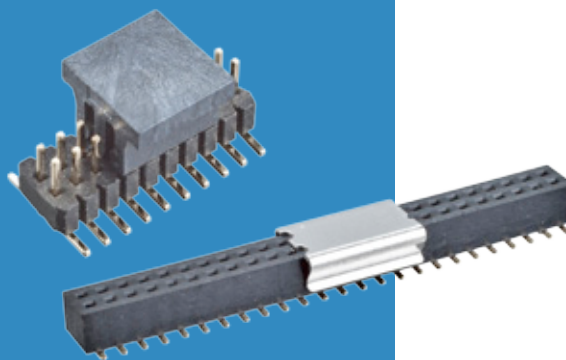
All dimensions in mm.

M40 Connectors

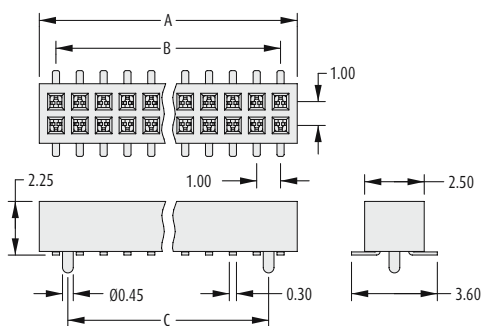
Vertical Surface Mount

A range of double row 1.00mm pitch SMT male and female connectors for board-to-board stacking.

- ❖ Locating pegs to ensure correct positioning onto the board.
- ❖ Supplied in tape and reel packaging with pick and place caps as standard.
- ❖ Twin beam female connector for higher durability.

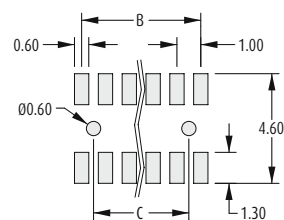


FEMALE



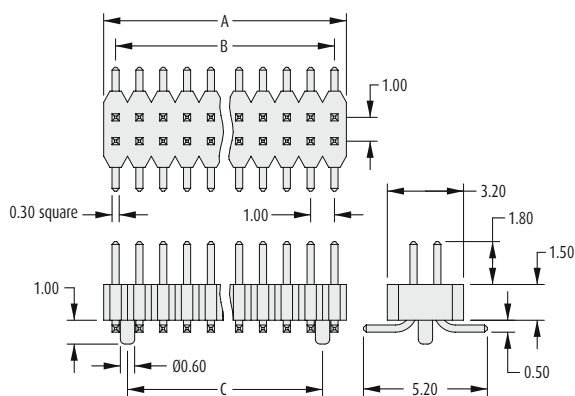
CALCULATION

A	$B + 1.40$
B	No. of contacts per row - 1
C	No. of contacts per row - 2



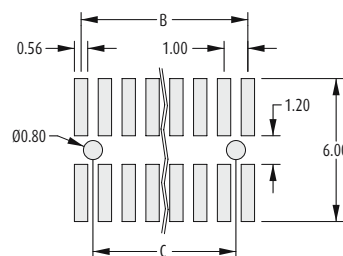
Recommended PC Board Pattern

MALE



CALCULATION

A	No. of contacts per row
B	No. of contacts per row - 1
C	No. of contacts per row - 2



Recommended PC Board Pattern

HOW TO ORDER

M40 - 3 X 0 XX 45 R

SERIES CODE

GENDER

1	Female
2	Male

TAPE & REELED

FINISH

45 Gold

TOTAL NO. OF CONTACTS

03, 04, 05, 06, 08, 10, 20, 25

All dimensions in mm.