

**COMPONENT SPECIFICATION**  
**M50 AND M52 SERIES CONNECTORS**

**AUGUST 2017**

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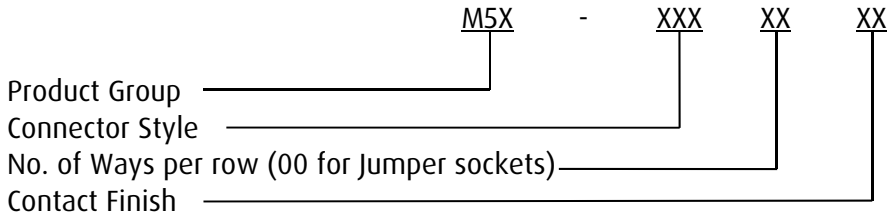
**COMPONENT SPECIFICATION**  
**M50 AND M52 SERIES CONNECTORS**

**1. DESCRIPTION OF CONNECTOR AND INTENDED APPLICATION.**

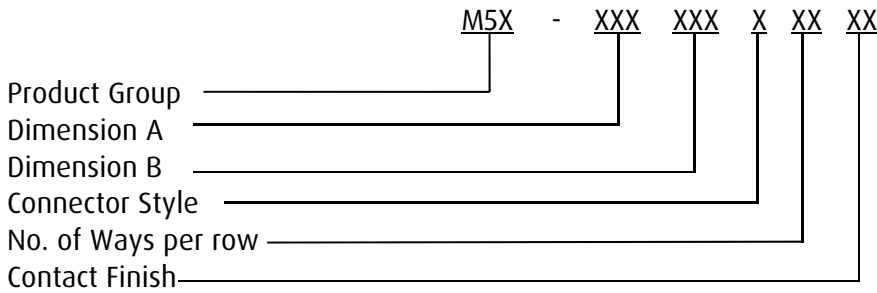
A range of 1.27mm pitch connectors, jumper sockets and IDC cable connectors, comprising vertical surface mount, vertical pc tail, horizontal pc tail, plugs and sockets of varying heights. Board-to-board spacing and configuration is obtained by the selection of an appropriate height plug and socket. M50 connectors are spaced 1.27mm between the rows, and are based on 0.40mm square or round pins. M52 connectors are spaced 2.54mm between the rows, and are based on 0.46mm square pins.

**2. MARKING OF THE CONNECTOR AND/OR PACKAGE (ORDER CODE).**

The marking (order code) shall appear on the package and shall be of the following style:



The marking (order code) for a pin header variant shall appear on the package and shall be of the following style:



Connector Style: See individual drawings for connector details.



**COMPONENT SPECIFICATION**  
**M50 AND M52 SERIES CONNECTORS (continued)**

**3. RATINGS (continued).**

**3.3. ENVIRONMENTAL CHARACTERISTICS (continued).**

Shock:

M50-19X/20X/300/320/350/360/380/390, All M52 .....	30G for 11ms
M50-311/315 .....	50G for 11ms
M50-310/312/430/470/480/490 .....	Not tested

**3.4. MECHANICAL CHARACTERISTICS.**

Durability:

M50-310/312/330/380/430/470/480/490/90X/91X.....	100 operations
M50-311 .....	600 operations
M50-315 .....	25 operations
M50-353/363/393 .....	500 operations
Others .....	300 operations

Insertion force (maximum):

M50-19X/20X.....	10N
M50-320/330/380/90X/91X, M52-500/510 .....	1N per contact
M50-310/312/430 .....	2N per contact
M50-311 .....	0.8N per contact
M50-300/303/313/314/315, M52-501/505/511/515 .....	1.5N per contact

Withdrawal force (minimum):

M50-19X/20X.....	1.3N
M50-310/312/315/330/380/430/90X/91X .....	0.15N per contact
M50-320, M52-500/510.....	0.12N per contact
M50-300, M52-501/505/511/515.....	0.1N per contact
M50-303/313/314 .....	0.2N per contact

Contact Retention force (minimum):

M50-19X/20X.....	4N
M50-300/320/350/360/390, M52-PH/501/505/511/515 .....	9.8N per contact
M50-310/312/430/470/480/490, M52-500/510 .....	1.5N per contact
M50-303/311/313/314/315 .....	3N per contact
M50-353/363/393 .....	2N per contact

**3.5. SOLDERING DATA.**

Solderability (for PC Tail & SMT products):

M50-311 .....	230°C for 3 seconds
M50-315 .....	260°C for 3 seconds
Others .....	245°C for 5 seconds

Soldering heat resistance (for PC Tail & SMT products) ..... 260°C for 10 seconds