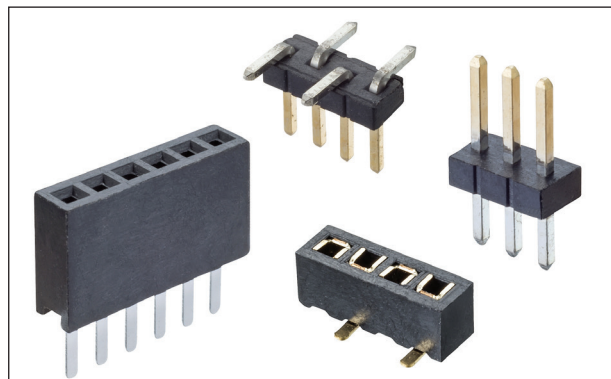


## Archer - 1.27mm Pitch

PCB Connectors for industrial and commercial use

The Archer range is a series of 1.27mm (0.05") pitch connectors in single and double row options. These industry standard connectors are an ideal choice for a miniature alternative to larger pin header and socket combinations:

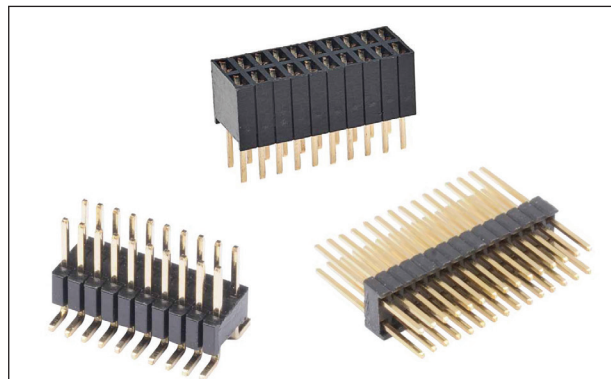
- **M50** - Board-to-Board pin headers and sockets in vertical and horizontal orientations (0.4mm square pins), and jumper sockets
- **M50 Polarized** - Board-to-Board double-row connectors with shrouding and polarization
- **M50 IDC** - Board-to-Cable double row for 0.635mm pitch ribbon cable with securing latches and polarization, including ready-made cable assemblies
- **M52** - Board-to-Board pin headers and sockets in vertical and horizontal orientation, 1.27 x 2.54mm pitch (0.46mm square pins)



Single row M50 connectors with 0.40mm square male pins



M50 IDC ready-made cable assembly with male and female connectors



M52 double row connectors, 2.54mm pitch between rows

### Features and Benefits

Board-to-Board and Cable-to-Board	Design flexibility for application requirements
Off-the-shelf cable assemblies	Stocked, ready-to-use complete solutions, no tooling required
Pin Header variants in M50 and M52	Customised male connectors for varying mating heights and longer tail requirements
50% space saving against 2.54mm pitch, 37% against 2mm pitch	Gives additional real estate space availability over larger industry standard pitches
Tape and reel packaging options on SMT product	Enables fast & low cost automated PCB assembly
Compatible with industry standard connectors	Allows simple product replacement or intermateability with existing equipment or modules
Options for dual entry, shrouded, polarized connectors, location pegs, ejector systems	A variety of options to assist with design for manufacture and promote ease of assembly
Jumper sockets	Allows on-board programming with pin headers

### Key Applications

Industrial	Drives and controls, fire alarm panels, robotics, monitoring equipment, meters
Consumer Electronics	Set-top boxes and consoles, home appliances, home automation systems
Telecoms	Hubs, routers, hand-held equipment, wireless modules, IOT
Retail	Point-of-sale equipment, warehouse inventory systems
Instrumentation	Test equipment, mobile monitoring devices, laboratory measurement systems
Medical	Diagnostic equipment, patient monitoring systems

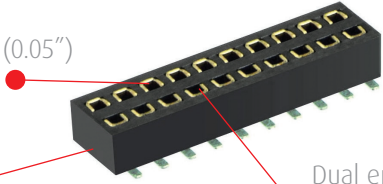
## Product Features

### M50 Board-to-Board

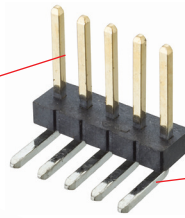
Miniature 1.27mm (0.05") pitch along and between rows

Location peg options

0.4mm square male pins



Dual entry and low profile sockets available



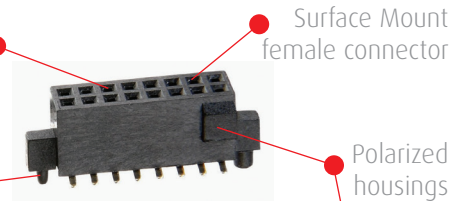
Simple pin header and socket designs

### M50 Polarized

Miniature 1.27mm (0.05") pitch along and between rows

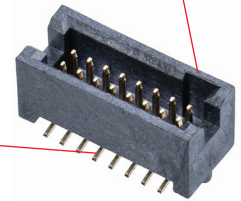
Location peg options

Choice of vertical SMT, vertical or horizontal throughboard male connectors

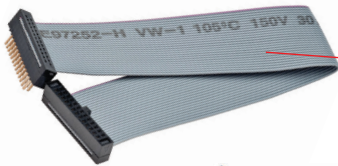


Surface Mount female connector

Polarized housings



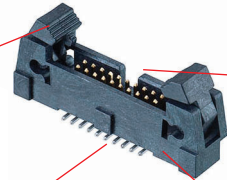
### M50 IDC



Cable connectors available loose or as complete cable assemblies

Latching with ejector system

Miniature 1.27mm (0.05") pitch along and between rows

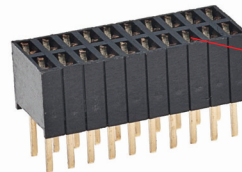


Polarized housings

Surface Mount or Throughboard male connector

### M52 Board-to-Board

Simple pin header and socket designs



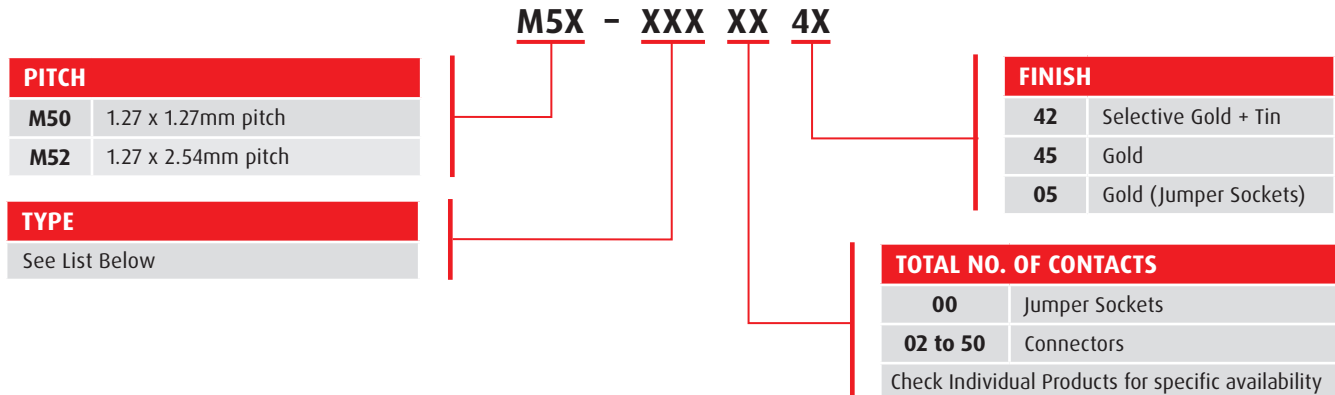
0.46mm square male pins

1.27mm (0.05") pitch along rows, 2.54mm (0.1") pitch between rows

## Specifications

Electrical		Mechanical & Environmental		Physical	
Current Rating	1A per contact typical (check individual products)	Number of mating cycles	Up to 600 (check individual products)	Housing	UL94V-0 rated thermoplastic
Maximum Voltage	300V for 1 minute min (check individual products)	Temperature Range	-40°C to +105°C (Ribbon cable assembly -20°C to +105°C)	Contacts	Copper alloy
Contact Resistance	30mΩ max	Insertion Force	2.0N max (Jumper sockets 10N max)	Plating	Gold or selective plating
Insulation Resistance	500MΩ min	Withdrawal Force	0.1N min		

## How to Order



## TYPE

### M50 BOARD-TO-BOARD

<b>M50-303</b>	Female Vertical Single Row PCT
<b>M50-300</b>	Female Vertical Double Row PCT
<b>M50-320</b>	Female Horizontal Double Row PCT
<b>M50-310</b>	Female Vertical Double Row SMT, 4.6mm high
<b>M50-311</b>	Female Vertical Double Row SMT (pegs), 4.6mm high
<b>M50-314</b>	Female Vertical Single Row SMT, 3.6mm high
<b>M50-312</b>	Female Vertical Double Row SMT, 3.6mm high
<b>M50-313</b>	Female Vertical Single Row SMT, 2.1mm high
<b>M50-315</b>	Female Vertical Double Row SMT (pegs), 2.2mm high
<b>M50-190</b>	Jumper Socket (Black)
<b>M50-192</b>	Jumper Socket (Red)
<b>M50-193</b>	Jumper Socket (Blue)
<b>M50-200</b>	Jumper Socket with handle (Black)
<b>M50-202</b>	Jumper Socket with handle (Red)
<b>M50-203</b>	Jumper Socket with handle (Blue)
<b>M50-353</b>	Male Vertical Single Row PCT
<b>M50-350</b>	Male Vertical Double Row PCT
<b>M50-393</b>	Male Horizontal Single Row PCT
<b>M50-390</b>	Male Horizontal Double Row PCT
<b>M50-363</b>	Male Vertical Single Row SMT
<b>M50-360</b>	Male Vertical Double Row SMT
<b>M50-361</b>	Male Vertical Double Row SMT (pegs)

PCT = Throughboard termination, SMT = Surface mount termination

### M50 POLARIZED

<b>M50-430</b>	Female Vertical Double Row SMT (pegs)
<b>M50-490</b>	Male Vertical Double Row SMT
<b>M50-491</b>	Male Vertical Double Row SMT (pegs)
<b>M50-470</b>	Male Vertical Double Row PCT
<b>M50-480</b>	Male Horizontal Double Row PCT

### M50 IDC

<b>M50-330</b>	Female Double Row IDC Cable Connector
<b>M50-910</b>	Female-to-Female Double Row 150mm Cable Assy
<b>M50-911</b>	Female-to-Female Double Row 300mm Cable Assy
<b>M50-355</b>	Male Vertical Double Row PCT (pegs)
<b>M50-365</b>	Male Vertical Double Row SMT (pegs)
<b>M50-380</b>	Male Double Row IDC Cable Connector
<b>M50-900</b>	Male-to-Female Double Row 150mm Cable Assy
<b>M50-901</b>	Male-to-Female Double Row 300mm Cable Assy

### M52 BOARD-TO-BOARD

<b>M52-500</b>	Female Vertical Single Row PCT, 4.6mm high
<b>M52-501</b>	Female Vertical Single Row PCT, 8.5mm high
<b>M52-510</b>	Female Vertical Double Row PCT, 4.6mm high
<b>M52-511</b>	Female Vertical Double Row PCT, 8.5mm high
<b>M52-505</b>	Female Vertical Single Row SMT
<b>M52-515</b>	Female Vertical Double Row SMT

Male connectors - See next page

## How to Order

### M52 Board-to-Board Male

M52 - 040 XXX X XX 45

#### TERMINATION LENGTH

<b>000</b>	Surface Mount
<b>023</b>	Throughboard, 2.3mm

#### NUMBER OF CONTACTS PER ROW

05, 10, 20, 25

#### TYPE

<b>S</b>	Single Row Surface Mount
<b>P</b>	Double Row Surface Mount
<b>V</b>	Single Row Throughboard
<b>W</b>	Double Row Throughboard

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