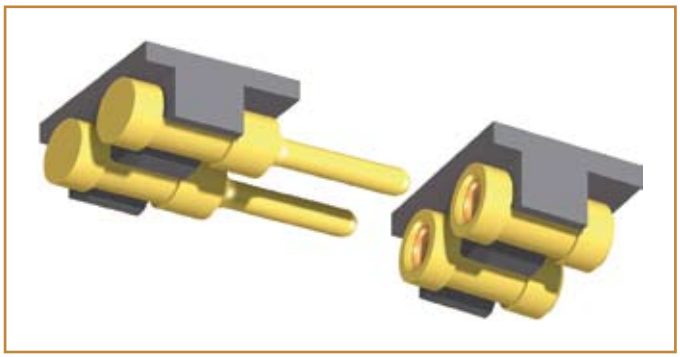
SMD SOCKET AND PIN CONNECTORS, PARALLEL MOUNT



1. DESCRIPTION AND GENERAL FEATURES

GENERAL DESCRIPTION

Low profile surface mount socket and pin connectors for parallel mounting. The number of contacts for each connector is from 2 to 10 poles. This pair of connectors is an optimal solution to connect and stack printed circuit boards. Both carriers are made of high temperature plastic and maintain the contacts in place during the soldering operation. Carrier is used as a pick & place cap allowing automatic positioning on the PCB. Cap is not foreseen to be removed after soldering. Both connectors can be supplied either in bulk or in a tape & reel packaging. Challenge was to develop a connector that will be soldered on a minimum PCB surface.

ADVANTAGES

Main advantage of this connector is its small size and it can be soldered from underneath. Optimal connection between two PCB. Reliable technology using our BeCu clip with 500 cycles guaranteed. The maximum current rating is 3 Amps.

APPLICATIONS

Pair of connectors (socket connector & pin header) has originally been designed and developed for a connection between two LED lighting strips. Each strip is equipped on one end with a 2-way socket connector and on the other end with a pin header. LED lighting strips are stackable. For this application, a connector with SMD solder tails at the back of the connector was not possible due to space limitation. This type of connectors can of course be used in many other applications where a board-to-board connection is needed.

OPTIONAL VERSIONS

Current version can be modified to meet with your specific requirements. Plastic carrier and contacts can easily be adapted to fit your application.

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2. TECHNICAL SPECIFICATIONS

ENVIRONTMENTAL

Operating temperature	-55 ... + 125°C
Climatic category (IEC)	55 / 125 / 21
Solderability	245°C, 5s
Resistance to soldering heat	260°C, 10s

MATERIALS

Contact body (socket)	Machined brass C36000, tin plating 5 µm Sn over 2.5 µm Ni
Contact body (pin)	Machined brass C36000, gold plating 0.25 µm Sn over 2.5 µm Ni
Contact spring	BeCu C17200, gold plated (gold flash or 0.75 µm) over Ni
Insulator	Glass filled polyester PCT-GF30-FR, self-extinguishing UL94V-0, colour black

MECHANICAL CHARACTERISTICS

Mating pins (socket)	Diameter 0.70 to 0.90 mm
Connecting pin	0.76 mm
Mechanical life	Min. 500 cycles
Coplanarity SMD terminations	Max. 0.1 mm

ELECTRICAL CHARACTERISTICS

Operating voltage	100 V_{RMS} / 150 V_{DC}
Rated current	3A
Contact resistance	max 10 mΩ
Insulation resistance	Min. 10'000 MΩ at 500 V_{aC}
Dielectric strength	500 V_{RMS}
Air and creepage distances	0.70 mm
Capacitance	1 pF max.

3. ORDERING INFORMATION

DIMENSIONS, ORDER CODE NUMBERS

SOCKET CONNECTOR 8FM-PP-0**NNN**-02-278

Contact Plating Code -PP-:	78-Body: tin Clip: gold flash 38-Body: tin Clip: 0.75 µm gold
Code for number of contacts –0**NNN**-:	2 to 10 contacts

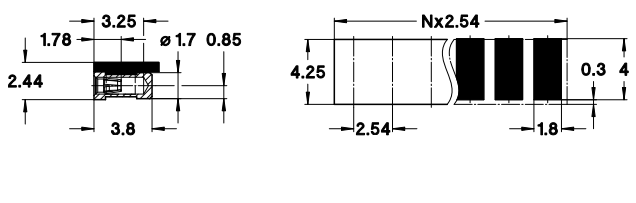
PIN CONNECTOR 8MM-11-0**NNN**-02-279

Contact Plating Code -11-:	Body and clip: 0.25 µm gold
Code for number of contacts –0**NNN**-:	2 to 10 contacts

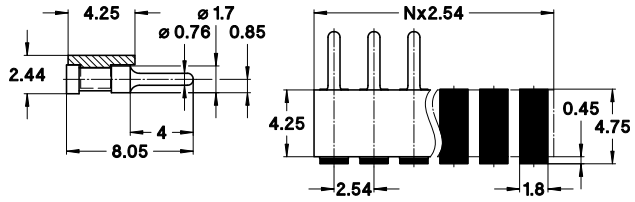
PACKAGING INFORMATION

Available in bulk or in tape & reel packaging.

4. TECHNICAL DRAWINGS



Socket conector 8FM-PP-0**NNN**-02-278



Pin conector 8MM-11-0**NNN**-02-279

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