SYCAMORE Contact
Surface Mount PCB Sockets

Single PCB connections

There are many electronics devices and modules that are replaceable – by soldering these products directly to the PCB, the life of the board is limited. By using a PCB socket for the board connections, the product becomes fully repairable. In some cases, a device may be too temperature sensitive – the use of a PCB socket can eliminate the soldering temperature exposure. SMT PCB Sockets are ideal for odd-form components, which do not fit in a regularly-spaced socket strip. As individual connections, they can also provide connectivity when just one signal or power connection is required.
Surface Mount PCB Sockets

High-Reliability connections

Previous designs of SMT contacts have only included 2 points of contact to the mating pin, making them potentially vulnerable to vibration. The Sycamore Contact patent-pending design incorporates 3 points of contact for improved continuous signal integrity. Sockets are also manufactured from Beryllium Copper for increased temperature range and increased durability (number of mating cycles), and gold-plated for improved wear resistance.
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Flexibility of design options

The Sycamore Contact is available in 4 designs – two entry types, two mating pin sizes:
- **S9111-45R** – Top entry design, suitable for Ø1.50 to Ø1.90mm mating pins.
- **S9121-45R** – Bottom entry design, suitable for Ø1.50 to Ø1.90mm mating pins.
- **S9131-45R** – Top entry design, suitable for Ø0.80 to Ø1.30mm mating pins.
- **S9141-45R** – Bottom entry design, suitable for Ø0.80 to Ø1.30mm mating pins.
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Ready for auto-placement

All SYCAMORE contacts are available in Tape and Reel packaging options, ready to facilitate automated assembly processes to the PCB. The SMT placement feet provide the pickup areas on either side of the product. Pack size is 1400 contacts per reel.
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Mating pin variability included

Due to the open-ended style of the design, mating pins of over-long design can easily be accommodated, in either direction.
# Surface Mount PCB Sockets

## Electrical & Mechanical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Rating</td>
<td>6A max</td>
</tr>
<tr>
<td>Contact Resistance</td>
<td>15mΩ max</td>
</tr>
<tr>
<td>Durability</td>
<td>500</td>
</tr>
</tbody>
</table>

Component Specifications are given in more detail on individual connector Technical Drawings, available to download from any individual product page.
# Surface Mount PCB Sockets

## Environmental Specifications

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>-50°C to +125°C</th>
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</thead>
<tbody>
<tr>
<td>Soldering Heat Resistance</td>
<td>260°C for 10 seconds</td>
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</tbody>
</table>

The use of the Beryllium Copper material gives the PCB sockets similar High-Reliability performance as the Gecko, Datamate and M300 products.
Surface Mount PCB Sockets Markets

The requirement for single connections or high-reliability odd-form modules can appear in any application, and the SYCAMORE Contact range from Harwin has the variety required to meet these needs.

- Fire and Security
- Gas Detection
- Home Automation
- Modular Systems
- Handheld Equipment
If you like this product, try...

PCB Sockets

- Two-piece turned shell PCB sockets and other SMT sockets
- Accepts mating pin sizes 0.5 to 1.8mm
- Low-profile and open-ended options
- Single connection designs for odd-form components
- Stocked in depth across the Harwin distribution network

Datamate - 2.00mm Pitch

- 3A per signal, up to 40A per power contact
- Jackscrew or latching system for strain relief
- Resists Vibration to 10G and Shock to 100G
- Temperature range -55 deg C to +125 deg C
- PCB connectors in Throughboard or SMT, Cable options
Get Help from a Harwin Expert

Our experts are specialists in their field with many years of experience in their respective roles and industries.

Find an expert that can help you with your enquiry.

Click Here >>

CAD Models and Evaluation Samples also available at www.harwin.com