

# "Gullwing Chip" Sockets

Screw-, Quick Lock & Clamshell Type

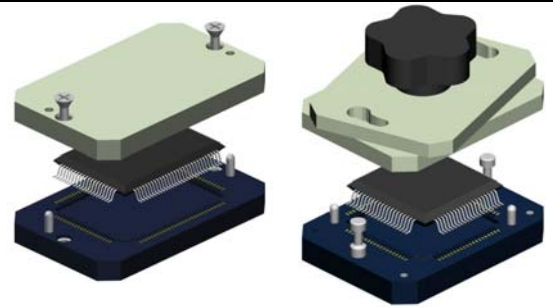


Gullwing sockets are available for any gullwing type chips (QFP, PQFP, SOIC, SO etc.) and lead pattern. The sockets are available for any pin-out and tip-to-tip dimension as of 0.50mm pitch upwards. The SMT socket is simply placed and reflowed onto the PCB in the same way as the chip and it only requires a small amount of additional board space. The standard locking system is the screw lock design, but Quick lock and Clamshell locking systems are also available.

We aim to solve your requirements - many different terminals and configurations are available.

Your custom sets our standards!

**Please note, we will always request the chip data to ensure we offer a compatible socket.**



Screw Lock Type

Knob Lock Type

| SMT style  | Soldertail style   | Solderless Compression style   |
|--|--|--|
| <p>PCB Pad Layout</p> <p>Pitch</p> <p>solder pad</p> <p>                     Ø 0,50mm/.020" if pitch 1,27mm<br/>                     Ø 0,50mm/.020" if pitch 1,00mm<br/>                     Ø 0,40mm/.016" if pitch 0,80mm<br/>                     Ø 0,35mm/.014" if pitch 0,75mm<br/>                     Ø 0,35mm/.014" if pitch 0,65mm<br/>                     Ø 0,30mm/.012" if pitch 0,50mm                 </p> | <p>Soldertail dimension:</p> <p>                     Ø 0,29mm/.011" if pitch 1,27mm<br/>                     Ø 0,29mm/.011" if pitch 1,00mm<br/>                     Ø 0,29mm/.011" if pitch 0,80mm<br/>                     Ø 0,27mm/.010" if pitch 0,75mm<br/>                     Ø 0,27mm/.010" if pitch 0,65mm<br/>                     Ø 0,27mm/.010" if pitch 0,50mm                 </p> <p>PCB solder hole:</p> <p>                     Ø 0,50mm/.020" if pitch 1,27mm<br/>                     Ø 0,50mm/.020" if pitch 1,00mm<br/>                     Ø 0,40mm/.016" if pitch 0,80mm<br/>                     Ø 0,35mm/.014" if pitch 0,75mm<br/>                     Ø 0,35mm/.014" if pitch 0,50mm                 </p> | <p>Retention frame</p> <p>Gullwing Device</p> <p>Socket body</p> <p>PC-Board</p> <p>Assembly board</p> <p>Pitch</p> <p>solder pad</p> <p>You may request any specific socket dimension from <a href="mailto:info@e-tec.com">info@e-tec.com</a></p> <p>                     gold plated pads Ø 0,60mm/.024" if pitch 1,27mm<br/>                     gold plated pads Ø 0,60mm/.024" if pitch 1,00mm<br/>                     gold plated pads Ø 0,50mm/.020" if pitch 0,80mm<br/>                     gold plated pads Ø 0,45mm/.018" if pitch 0,75mm<br/>                     gold plated pads Ø 0,40mm/.016" if pitch 0,65mm<br/>                     gold plated pads Ø 0,35mm/.012" if pitch 0,50mm                 </p> |

| Quick Lock Type   | Clamshell Type   | Specifications  |
|---|--|---|
| <p><b>without lever for low leadcount chips</b></p>   | <p><b>with lever for high leadcount chips</b></p>        | <p><b>Mechanical data</b></p> <p>Contact life: 10.000 cycles min.</p> <p>Retention System life: 1.000 cycles min.</p> <p>Screw lock: 10.000 cycles min.</p> <p>Quick lock &amp; Clamshell: as per IEC 60068-2-58</p> <p>Solderability: 40 grams max.</p> <p><b>Material</b></p> <p>Insulator: (RoHS compliant) High temp plastic or epoxy FR4</p> <p>Terminal: (RoHS compliant) Brass</p> <p>Contact: (RoHS compliant) BeCu</p> <p><b>Electrical data</b></p> <p>Contact resistance: &lt; 100 mΩ</p> <p>Current rating: 500 mA max.</p> <p>Insulation resistance at 500V DC: 100 MΩ if 0.50 to 0.80mm pitch, 500 MΩ 1.00mm pitch upwards</p> <p>Breakdown voltage at 60 Hz: 500V min.</p> <p>Capacitance: &lt; 1 pF</p> <p>Inductance: &lt; 2 nH</p> <p><b>Operating temperature</b></p> <p>-55°C to +125°C ; 260°C for 60 sec.</p> |
| <p><b>without center screw for low leadcount chips</b></p>  | <p><b>with center screw for high leadcount chips</b></p> |   |
| <p><b>Recommendations:</b></p> <p>Solder paste: Please use a solder paste w/o any silver!</p> <p>Solder profile: Please refer to our website <a href="http://www.e-tec.com">www.e-tec.com</a></p> <p>E-tec solderless sockets are adapted to a standard PCB thickness of 1.60mm.</p> <p>For a different PCB thickness, please inform E-tec first!</p> |  |   |

## How to order

QF X x x x x - x x x x x x x x L ← optional for locating pegs

| Retention Type  | Nbr of contacts                            | Pitch   | Grid Code  | Config Code  | Plating   |
|---|--|---|--|--|---|
| <p><b>W</b> = screw lock</p> <p><b>Q</b> = quick lock</p> <p><b>C</b> = clamshell</p> | <p><i>depends on leadcount of chip</i></p> | <p><b>05</b> = 0,50mm</p> <p><b>06</b> = 0,65mm</p> <p><b>07</b> = 0,75mm</p> <p><b>08</b> = 0,80mm</p> <p><b>10</b> = 1,00mm</p> <p><b>12</b> = 1,27mm</p> <p><i>others on request</i></p> | <p><i>will be given by the factory after receipt of the chip datasheet</i></p> | <p><i>will be given by the factory after receipt of the chip datasheet</i></p> | <p><b>95</b> = tin/gold (tin leadfree)</p> <hr/> <p><b>55</b> = gold only for solderless Compression Type</p> |

## Contact Type

- 30** = standard SMT... („A“ = 0,80mm if 1,27mm pitch or 1,00mm pitch, 0,60 if 0,80mm pitch; 0,40mm if <0,80mm pitch)
- 29** = raised SMT... („A“ = 3,20mm if 1,27mm pitch or 1,00mm pitch; 2,80mm if 0,80mm pitch, 2,30mm if <0,80mm pitch)
- 28** = special raised SMT - only for 1,27, 1,00 & 0,80mm pitch..... („A“ = 4,50mm)
- 70** = standard solder tail..... („A“ = 2,80 if 1,27mm pitch, 1,00mm or 0,80mm pitch; 2,30mm if <0,80mm pitch)
- 90** = solderless Compression Type