”GullWing Chip” Sockets

Screw-, Fast-, QuickLock & ClamShell Type

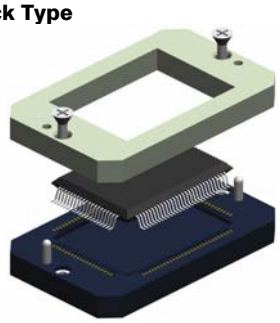
GullWing sockets are available for any GullWing type chips (QFP, PQFP, SOIC, SO etc.) and lead pattern. The sockets are available for any pin-out and tip-to-tip dimension as of 0.50mm pitch upwards. The SMT socket is simply placed and reflowed onto the PCB in the same way as the chip and it only requires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

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

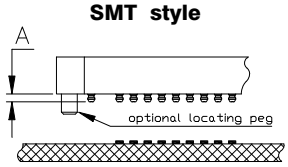
Your custom sets our standards!

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

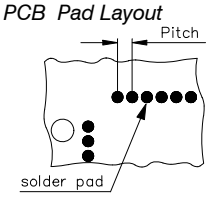
ScrewLock Type



SMT style

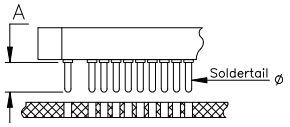


PCB Pad Layout



Ø 0,50mm/.020“ if pitch 1,27mm
Ø 0,50mm/.020“ if pitch 1,00mm
Ø 0,40mm/.016“ if pitch 0,80mm
Ø 0,35mm/.014“ if pitch 0,75mm
Ø 0,35mm/.014“ if pitch 0,65mm
Ø 0,30mm/.012“ if pitch 0,50mm

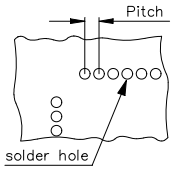
Soldertail style



Soldertail dimension:

Ø 0,29mm/.011” if pitch 1,27mm
Ø 0,29mm/.011” if pitch 1,00mm
Ø 0,29mm/.011” if pitch 0,80mm
Ø 0,27mm/.010” if pitch 0,75mm
Ø 0,27mm/.010” if pitch 0,65mm
Ø 0,27mm/.010” if pitch 0,50mm

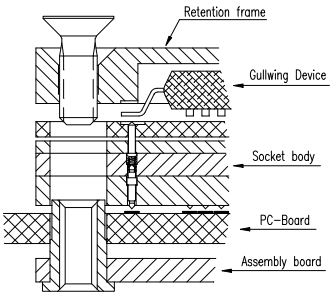
PCB Hole Layout

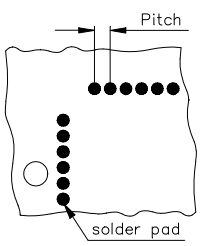


PCB solder hole:

Ø 0,50mm/.020” if pitch 1,27mm
Ø 0,50mm/.020” if pitch 1,00mm
Ø 0,40mm/.016” if pitch 0,80mm
Ø 0,35mm/.014” if pitch 0,75mm
Ø 0,35mm/.014” if pitch 0,65mm
Ø 0,35mm/.014” if pitch 0,50mm

Solderless Compression style

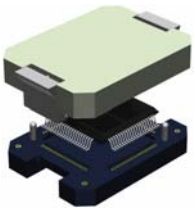




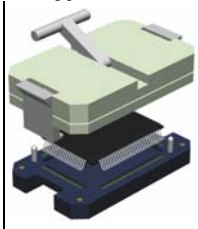
You may request any specific socket dimension from info@e-tec.com

gold plated pads Ø 0,60mm/.024“ if pitch 1,27mm
gold plated pads Ø 0,60mm/.024“ if pitch 1,00mm
gold plated pads Ø 0,50mm/.020“ if pitch 0,80mm
gold plated pads Ø 0,45mm/.018“ if pitch 0,75mm
gold plated pads Ø 0,40mm/.016“ if pitch 0,65mm
gold plated pads Ø 0,35mm/.012“ if pitch 0,50mm

Quick Lock Type

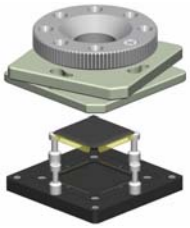


without lever for low leadcount chips



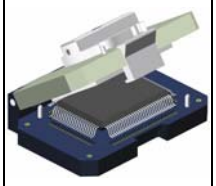
with lever for high leadcount chips

FastLock Type



adapted to low and high leadcount chips

ClamShell Type



with center screw for high leadcount chips

Recommendations:

Solder paste – Please use a solder paste w/o any silver!
Solder profile – Please refer to our website www.e-tec.com

E-tec solderless sockets are adapted to a standard PCB thickness of 1.60mm. For a different PCB thickness, please inform E-tec first!

The SMT sockets are mounted with straight SMT pins (not bent legs), which are adapted to round PCB pads. For rectangular PCB pads, please ensure that the round socket pins will be surface mountable, since E-tec cannot offer any guarantee in such instances.

For SMT sockets in general, E-tec recommends the use of locating pegs, which can be soldered to the PCB for added mechanical strength.

Specifications

Mechanical data

Contact life	10.000 cycles min.
Retention System life	
ScrewLock & FastLock	1.000 cycles min.
QuickLock & ClamShell	10.000 cycles min.
Solderability	as per IEC 60068-2-58
Individual contact force	40 grams max.

Material

Insulator *(RoHS compliant)*	High temp plastic or epoxy FR4
Terminal *(RoHS compliant)*	Brass
Contact *(RoHS compliant)*	BeCu

Electrical data

Contact resistance	< 100 mΩ
Current rating	500 mA max.
Insulation resistance at 500V DC	100 MΩ if 0.50 to 0.80mm pitch 500 MΩ 1.00mm pitch upwards
Breakdown voltage at 60 Hz	500V min.
Capacitance	< 1 pF
Inductance	< 2 nH

Operating temperature –55°C to +125°C ; 260°C for 60 sec.

How to order

QF X xxxx - xx xx - xx XX xx L ← optional for locating pegs

Retention Type

W = ScrewLock
F = FastLock
Q = QuickLock
C = ClamShell

Nbr of contacts

depends on leadcount of chip

Pitch

05 = 0,50mm
63 = 0,635mm
06 = 0,65mm
07 = 0,75mm
08 = 0,80mm
10 = 1,00mm
12 = 1,27mm
others on request

Grid Code | Config Code

will be given by the factory after receipt of the chip datasheet

Plating

95 = tin/gold *(tin leadfree)*
55 = gold *only for solderless Compression Type*

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