

E-tec is now the leading BGA socket manufacturer.

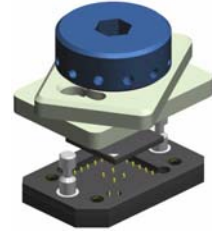
EP patents 0829188, 0897655 US patents 6190181, 6249440 Patented in other countries.

QFN/MLF/MLP sockets are available for any chip size and pitch. They are available in SMT, thru-hole and solderless compression type versions. 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 retainer can be delivered with a center opening for die access. Additional center grounding pins are offered on request.

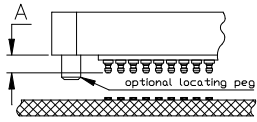
We aim to solve your requirements - your custom sets our standards!

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

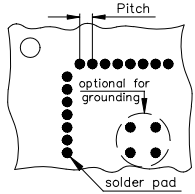
FastLock Type



SMT style

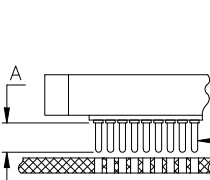


PCB Pad Layout

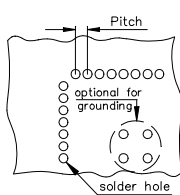


Ø 0,60mm/.024" if pitch 1,27mm
Ø 0,50mm/.020" if pitch 1,00mm
Ø 0,40mm/.016" if pitch 0,80mm
Ø 0,35mm/.014" if pitch 0,75mm
Ø 0,35mm/.014" if pitch 0,65mm
Ø 0,30mm/.012" if pitch 0,50mm

Soldertail style



PCB Pad Layout



Soldertail dimension:

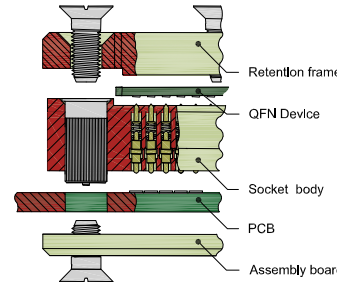
Ø 0,42mm/.016" if pitch 1,27mm
Ø 0,29mm/.011" if pitch 1,00mm
Ø 0,29mm/.011" if pitch 0,80mm
Ø 0,27mm/.010" if pitch 0,75mm
Ø 0,27mm/.010" if pitch 0,65mm
Ø 0,27mm/.010" if pitch 0,50mm
Ø 0,17mm/.007" if pitch 0,40mm

PCB solder hole:

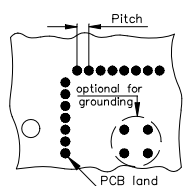
Ø 0,60mm/.024" if pitch 1,27mm
Ø 0,50mm/.020" if pitch 1,00mm
Ø 0,40mm/.016" if pitch 0,80mm
Ø 0,35mm/.014" if pitch 0,75mm
Ø 0,35mm/.014" if pitch 0,65mm
Ø 0,35mm/.014" if pitch 0,50mm
Ø 0,25mm/.010" if pitch 0,40mm

Solderless Compression style

(TwistLock Type as example shown)



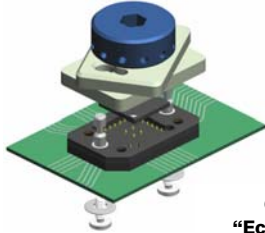
PCB Pad Layout



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

gold plated pads Ø 0,70mm/.027" 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
gold plated pads Ø 0,25mm/.010" if pitch 0,40mm

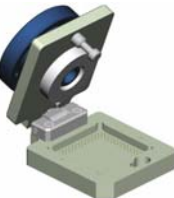
FastLock Solderless Compression Type



TwistLock Solderless Compression Type



ClamShell "Economy" Type



QuickLock Type



Specifications

Mechanical data

Contact life
Retention System life

10.000 cycles min.
TwistLock: 1.000 cycles min.
ClamShell, Fast- & QuickLock: 10.000 cycles min.

Solderability
Individual contact force

as per IEC 60068-2-58
40 grams max.

Material

Insulator (RoHS compliant)
Terminal (RoHS compliant)
Contact (RoHS compliant)

High temp plastic or epoxy FR4
Brass
BeCu

Electrical data

Contact resistance
Current rating
Insulation resistance at 500V DC

< 100 mΩ
500 mA max.
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.

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!

SMT sockets are recommended to be ordered with locating pegs for soldering to the PCB, to avoid the solderjoints from being stressed due to the torque forces applied with this locking system. If used without locating pegs, the life cycle of the socket may be heavily reduced.

How to order

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

Locking Type

W = TwistLock
F = FastLock
Q = QuickLock
E = ClamShell
"Economy" Type
Others on request

Nbr of contacts

depends on
landcount of chip,
plus center
grounding pins
if required.
(generally 4 pins)

Pitch

04 = 0,40mm
05 = 0,50mm
06 = 0,65mm
07 = 0,75mm
08 = 0,80mm
10 = 1,00mm
12 = 1,27mm
Others on request

Grid Code

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

Config Code

Plating

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

Contact Type

30 = standard SMT... ("A" = 1,20mm if 1,27mm pitch; 0,80mm if 1,00mm pitch, 0,60 if 0,80mm pitch; 0,40mm if <0,80mm pitch)
29 = raised SMT... ("A" = 5,00mm if 1,27mm pitch; 3,20mm if 1,00mm pitch; 2,80mm if 0,80mm pitch, 2,30mm if <0,80mm pitch)
28 = special raised SMT - only for 1.00 & 0.80mm pitch..... ("A" = 4,50mm)
70 = standard solder tail..... ("A" = 3,30 if 1,27mm pitch, 2,80 if 1,00mm or 0,80mm pitch, 2,30mm if <0,80mm pitch)
90 & 91 = compression type (see page 13 for more details)