



(1.27 mm) .050"

# SMT MICRO HEADER

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com/FTSH](http://www.samtec.com/FTSH)

**Insulator Material:**  
Black Liquid Crystal Polymer  
**Terminal Material:**  
Phosphor Bronze  
**Plating:**  
Sn or Au over 50 μm (1.27 μm) Ni

**Current Rating (FTSH/CLP):**  
3.4 A per pin  
(2 pins powered)

**Operating Temp Range:**  
-55 °C to +125 °C

**RoHS Compliant:**  
Yes

## PROCESSING

**Lead-Free Solderable:**  
Yes

**SMT Lead Coplanarity:**  
-MT & -DV Tail Option:  
(0.10 mm) .004" max (02-25)  
-MT & -DH Tail Option:  
(0.15 mm) .006" max (26-50)\*  
\*(.004" stencil solution may be available; contact IPG@samtec.com)

## RECOGNITIONS

For complete scope of recognitions see [www.samtec.com/quality](http://www.samtec.com/quality)



## ALSO AVAILABLE (MOQ Required)

- Molded Pick & Place pads
- Latches
- Other platings

**Notes:**  
Some sizes, styles and options are non-standard, non-returnable.

See SFM/TFM for positive alignment feature.

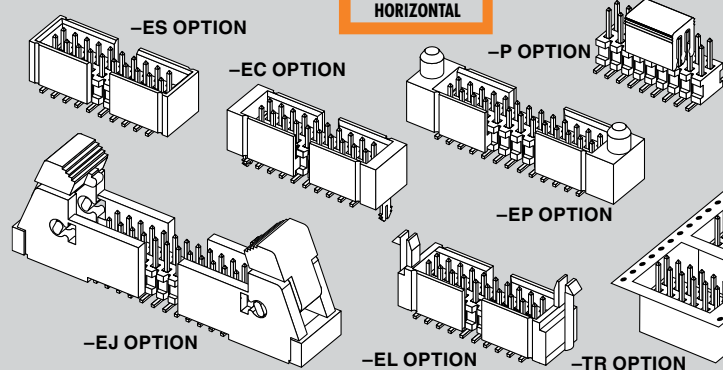
**Board Mates:**  
CLP, FLE

**Cable Mates:**  
FFSD, FFTP

## APPLICATIONS



## OPTIONS



## OTHER SOLUTIONS



Ultra-low profile option available.  
End Shrouds available.  
Call for FTS Series specifications.

## HIGH-SPEED CHANNEL PERFORMANCE

Rating based on Samtec reference channel. For full SI performance data visit [Samtec.com](http://Samtec.com) or contact [SIG@samtec.com](mailto:SIG@samtec.com)

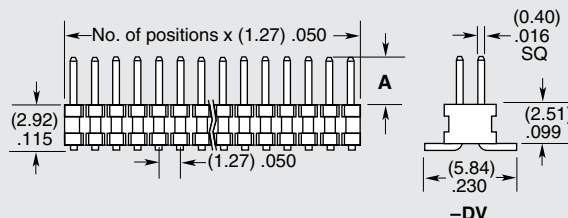
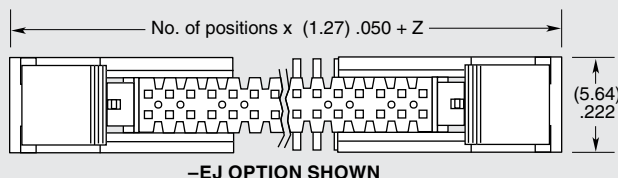
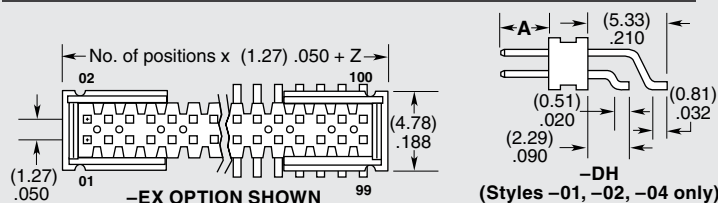
8  
Gbps

FTSH

1

NO. PINS  
PER ROWLEAD  
STYLE

02 thru 50



| OPTION | Z            |
|--------|--------------|
| -ES    | (2.57) .101  |
| -EJ    | (15.77) .621 |
| -EC    | (3.33) .131  |
| -EP    | (5.87) .231  |
| -EL    | (6.53) .257  |

**-01**  
= (3.05 mm) .120" Post  
(Mates with FFSD)

**-02**  
= (1.91 mm) .075" Post  
(Mates with FLE)

**-03**  
= (1.65 mm) .065" Post  
(Mates with CLP-D)

**-04**  
= (3.81 mm) .150" Post  
(Mates with CLP-DH)

**-05**  
= (4.32 mm) .170" Post  
(Mates with CLP-BE)

| LEAD STYLE | A           |
|------------|-------------|
| -01        | (3.05) .120 |
| -02        | (1.91) .075 |
| -03        | (1.65) .065 |
| -04        | (3.81) .150 |
| -05        | (4.32) .170 |

Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)

All parts within this catalog are built to Samtec's specifications.

Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.

FTSH-117-02-L-DV

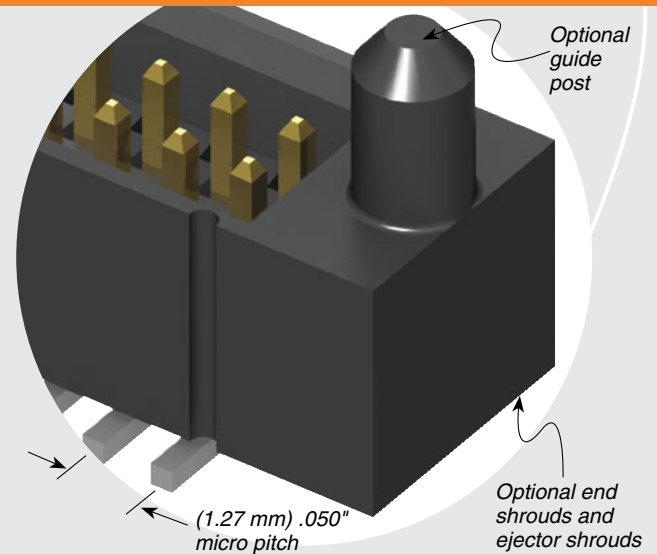
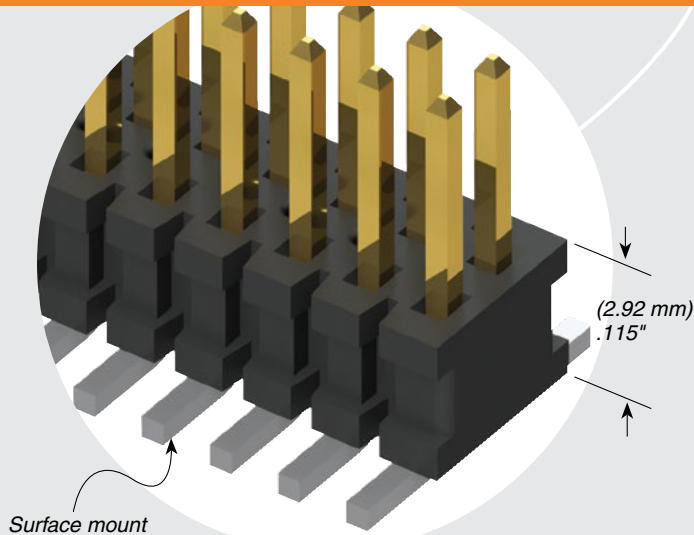
FTSH-113-02-L-DH-C

FTSH-150-02-L-DV-EP

FTSH-110-04-F-DV

FTSH-112-03-L-DV-EP-P

## FTSH SERIES

PLATING  
OPTION

**-F**  
= Gold flash  
on post,  
Matte Tin  
on tail

**-L**  
= 10  $\mu$ "  
(0.25  $\mu$ m)  
Gold on post,  
Matte Tin  
on tail

TAIL  
OPTION

**-DV**  
= Double  
Vertical

**-DH**  
= Double  
Horizontal  
(Styles  
-01, -02 &  
-04 only)

**-MT**  
= Mixed  
Technology  
(Styles  
-01, -02 &  
-04 only)

## OPTION

Leave Blank  
for -DH & -MT

**-“XXX”**  
= Polarized  
Position  
(Specify  
position of  
omitted pin)  
(Not available  
with -EX  
options)

FLEX SHROUD  
OPTIONS

(Style -02 & -03 only, -DH & -MT not available)  
9 pins/row minimum  
(Other positions available. Call Samtec.)

**-ES**  
= End Shroud

**-EC**  
= End Shroud  
with Locking Clip  
(Manual placement  
required)

**-EP**  
= End Shroud  
with Guide Post

**-EL**  
= End Shroud with Board Lock  
(Boards are positively locked  
and cannot be unmated)

**-EJ**  
= Ejector Shroud  
(Style -01 only)  
-DH & -MT not available  
10 pins/row minimum  
25 pins/row maximum

OTHER  
OPTIONS

**-K**  
= Keying Shroud  
(For mating with FFSD  
Style -01 only and  
05, 08, 10, 13, 15, 17, 20 & 25  
pins/row only. 13, 17, 20 & 25  
pins/row only with -EJ option)  
(-DV only)

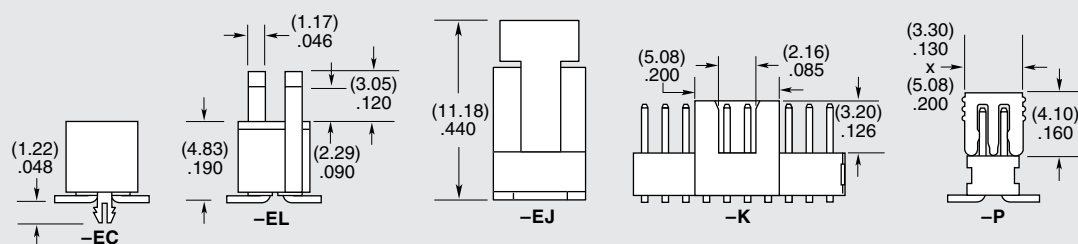
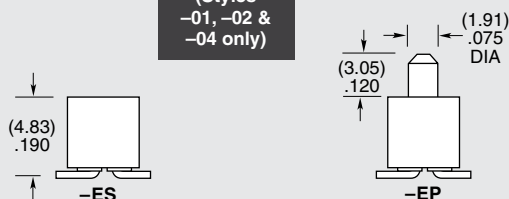
**-A**  
= Alignment Pin  
(-DV 3 positions min.)  
(-DH 5 positions min.)  
(Metal or plastic at  
Samtec discretion)

**-C**  
= (5.00 mm) .197" DIA  
Polyimide film Pick & Place Pad  
(-DH only)

**-P**  
= Pick & Place Pad  
(-DV 4 positions min.)  
(-DH & -MT not available)

**-TR**  
= Tape & Reel Packaging  
(Flex Shroud options not  
available except -ES & -EJ)

**-FR**  
= Full Reel Tape & Reel Packaging  
(Must order maximum quantities  
per reel. Contact Samtec  
for parts per reel)



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