



(0,40 mm) .0158"

SS4, ST4 SERIES

# ULTRA FINE PITCH HEADER & SOCKET

SS4 Mates with:  
ST4

ST4 Mates with:  
SS4

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?SS4](http://www.samtec.com?SS4) or [www.samtec.com?ST4](http://www.samtec.com?ST4)

**Insulator Material:**

Black LCP

**Contact Material:**

Phosphor Bronze

**Plating:**

Au or Sn over

50µ" (1,27 µm) Ni

**Operating Temp Range:**

-55°C to +125°C

**Current Rating:**

1.4 A per pin

(1 pin powered per row)

**RoHS Compliant:**

Yes

**Processing:**

Lead-Free Solderable:

Yes

**SMT Lead Coplanarity:**

(0,10 mm) .004" max

## RECOGNITIONS

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



FILE NO. E111594

SS4-40-3.00-L-D-K-TR

ST4-20-1.00-L-D-P-TR



SS4-20-3.00-L-D-K-TR

ST4-40-1.00-L-D-P-TR



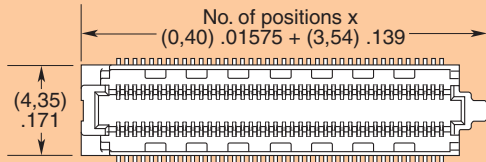
-10, -20,  
-30, -40, -50

-3.00  
= 3.00 mm  
-3.50  
= 3.50 mm

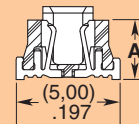
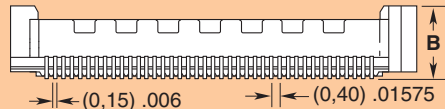
-L  
= 10µ" (0,25 µm)  
Gold on contact,  
Matte Tin on tail

(Required in callout)  
-K  
= (3,51 mm)  
.138" DIA  
Polyimide  
Film Pick &  
Place Pad

(Required in callout)  
-TR  
= Tape &  
Reel



LEAD STYLE	A	B
-3.00	(2,85) .112	(3,50) .138
-3.50	(3,35) .132	(4,00) .157



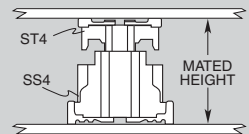
SS4/ST4 4 mm Stack Height	Rated @ 3dB Insertion Loss	
	with PCB effects*	w/o PCB effects**
Single-Ended Signaling	7.0 GHz / 14 Gbps	13.5 GHz / 27 Gbps
Differential Pair Signaling	4.5 GHz / 9 Gbps	15.5 GHz / 31 Gbps

\*Performance data includes effects of a non-optimized PCB.  
\*\*Test board losses de-embedded from performance data.

Performance data for other stack heights and complete test data available at [www.samtec.com?SS4](http://www.samtec.com?SS4), [www.samtec.com?ST4](http://www.samtec.com?ST4) or contact [sig@samtec.com](mailto:sig@samtec.com)



## MATED HEIGHT



MATED HEIGHT*		
ST4 LEAD STYLE	SS4 LEAD STYLE	
	-3.00	-3.50
-1.00	(4,00) .157	(4,50) .177
-1.50	(4,50) .177	(5,00) .197
-2.50	(5,50) .217	(6,00) .236

\*Processing conditions will affect mated height.



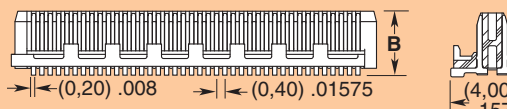
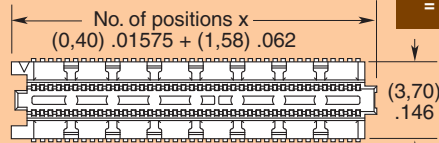
-10, -20,  
-30, -40, -50

-1.00  
= 1.00 mm  
-1.50  
= 1.50 mm  
-2.50  
= 2.50 mm

-L  
= 10µ" (0,25 µm)  
Gold on contact,  
Matte Tin on tail

(Required in callout)  
-P  
= Pick &  
Place Pad

(Required in callout)  
-TR  
= Tape &  
Reel



LEAD STYLE	A	B
-1.00	(1,00) .039	(3,08) .121
-1.50	(1,50) .059	(3,58) .141
-2.50	(2,50) .098	(4,58) .180

**Note:** Some lengths, styles and options are non-standard, non-returnable.

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

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