

(1.27 mm) .050"

SEAM SERIES

# HIGH SPEED/HIGH DENSITY OPEN PIN FIELD

## SPECIFICATIONS

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

### Insulator Material:

Black LCP

### Contact Material:

Copper Alloy

### Operating Temp Range:

-55°C to +125°C

### Current Rating

(7 mm stack height):

1.8 A per pin

(10 adjacent pins powered)

### Plating:

Au or Sn over

50 μ" (1.27 μm) Ni

Contact Resistance: 5.5 mΩ

Working Voltage: 240 VAC

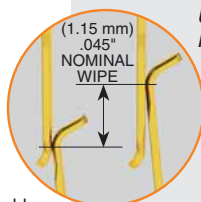
RoHS Compliant: Yes

Lead-Free Solderable: Yes

Mates with:  
SEAF, SEAFP

Note: Patented

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



Low insertion/extraction forces

Up to 500 Pins

5, 8 and 10 row footprint compatible with SamArray®. Samples recommended.

Solder charges

## RECOGNITIONS

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



Industry Standards

PISMO 2

VITA 47

VITA 57

Protocols Supported

100 GbE

Fibre Channel

Rapid I/O

PCI Express®

SATA

InfiniBand™

Download app notes at:

[www.samtec.com/appnote](http://www.samtec.com/appnote)

Contact SIG @ samtec.com

for questions on protocols

| MATED HEIGHTS   |                 |         |         |
|-----------------|-----------------|---------|---------|
| SEAM LEAD STYLE | SEAF LEAD STYLE | -05.0   | -06.0   |
| -02.0           | 7 mm            | 8 mm    | 8.5 mm  |
| -03.0           | 8 mm            | 9 mm    | 9.5 mm  |
| -03.5           | 8.5 mm          | 9.5 mm  | 10 mm   |
| -06.5           | 11.5 mm         | 12.5 mm | 13 mm   |
| -07.0           | 12 mm           | 13 mm   | 13.5 mm |
| -09.0           | 14 mm           | 15 mm   | 15.5 mm |
| -11.0           | 16 mm           | 17 mm   | 17.5 mm |

| SEAM/SEAF 10 mm Stack Height | Rated @ 3dB Insertion Loss w/o PCB effects* |
|------------------------------|---------------------------------------------|
| Single-Ended Signaling       | 18 GHz / 36 Gbps                            |
| Differential Pair Signaling  | 18 GHz / 36 Gbps                            |

\*Test board losses de-embedded from performance data.  
Performance data for other stack heights and complete test data available at [www.samtec.com?SEAM](http://www.samtec.com?SEAM) or contact [sig@samtec.com](mailto:sig@samtec.com)

SEAM — NO. PINS PER ROW — LEAD STYLE — PLATING OPTION — NO. OF ROWS — SOLDER TYPE — A — K — TR

-10, -15, -20, -30, -40, -50  
(-10 only available in 04 row)  
(-15 only available in 10 row)

Specify LEAD STYLE from chart

| NO. OF ROWS | B            |
|-------------|--------------|
| -04         | (7.06) .278  |
| -05, -06    | (9.60) .378  |
| -08         | (12.14) .478 |
| -10         | (14.68) .578 |

-L  
= 10 μ" (0.25 μm)  
Gold on contact area, Matte Tin on solder tail

-S  
= 30 μ" (0.76 μm)  
Gold on contact area, Matte Tin on solder tail

-04  
= Four Rows (-06.5 not available)

-05  
= Five Rows (-06.5 not available)

-06  
= Six Rows (-06.5 not available)

-08  
= Eight Rows

-10  
= Ten Rows

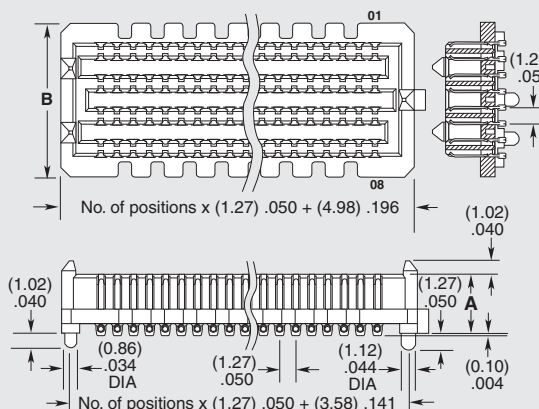
-1  
= Tin/Lead Alloy Solder Charge

-2  
= Lead-Free Solder Charge

-A  
= Alignment Pins (Required. Arrays will not self-center on solder pads)

-K  
= Polyimide film Pick & Place Pad

-TR  
= Tape & Reel



| LEAD STYLE | A            |
|------------|--------------|
| -02.0      | (4.60) .181  |
| -03.0      | (5.59) .220  |
| -03.5      | (6.10) .240  |
| -06.5      | (9.14) .360  |
| -07.0      | (9.60) .378  |
| -09.0      | (11.60) .457 |
| -11.0      | (13.60) .535 |

## DIFFERENTIAL

| ARRAY | PAIR COUNT |
|-------|------------|
| 40x8  | 80         |
| 40x6  | 60         |
| 30x10 | 75         |
| 30x8  | 60         |
| 30x6  | 45         |
| 20x10 | 50         |
| 20x8  | 40         |
| 20x5  | 25         |