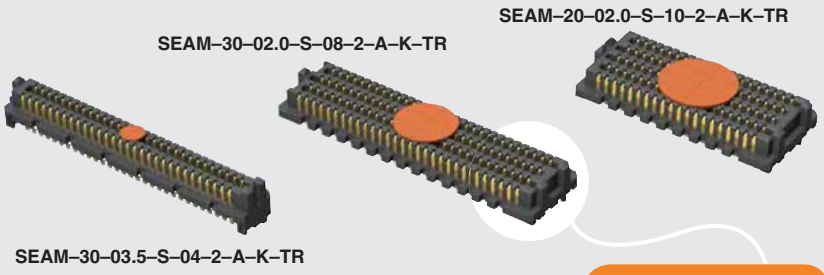
samtec

SEARAY™




(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

**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

## RECOGNITIONS

For complete scope of recognitions see www.samtec.com/quality

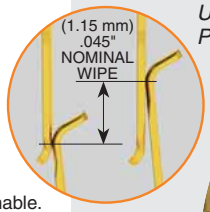
FILE NO. E111594

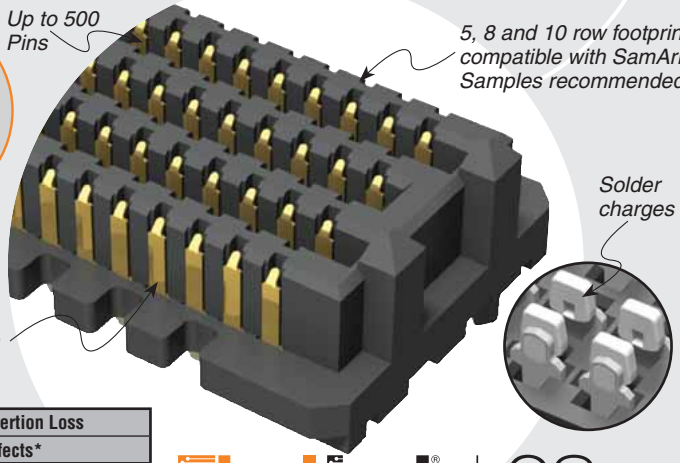
**Mates with:** SEAF, SEAFP

**Note:** Patented

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

E.L.P.™ EXTENDED LIFE PRODUCT
10 year Mixed Flowing Gas with 30µ" Gold
Call Samtec for maximum mated cycles




| 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 or contact sig@samtec.com

Final Inch® CERTIFIED Patent Pending | 28+ Gbps

## Industry Standards Protocols Supported

PISMO 2
VITA 47
VITA 57
100 GbE
Fibre Channel
Rapid I/O
PCI Express®
SATA
InfiniBand™
Download app notes at www.samtec.com/appnote
Contact SIG @ samtec.com for questions on protocols

| MATED HEIGHTS | | | |
|---|---|---|---|
| SEAM LEAD STYLE | SEAF LEAD STYLE –05.0 | –06.0 | –06.5 |
| –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 – NO. PINS PER ROW – LEAD STYLE – PLATING OPTION – NO. OF ROWS – SOLDER TYPE – A – K – TR

**NO. PINS PER ROW:** –10, –15, –20, –30, –40, –50
(–10 only available in 04 row)
(–15 only available in 10 row)

**LEAD STYLE:** Specify LEAD STYLE from chart

**PLATING OPTION:**
–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

**NO. OF ROWS:**
–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

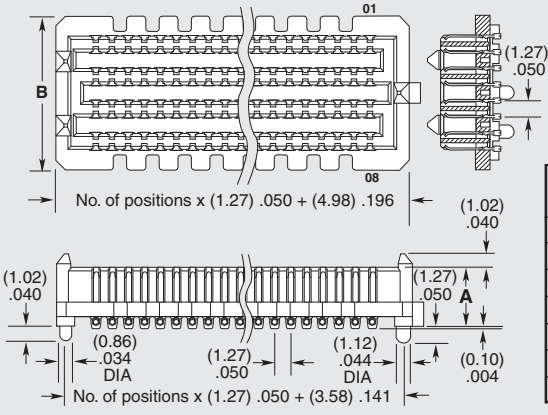
**SOLDER TYPE:**
–1 = Tin/Lead Alloy Solder Charge
–2 = Lead-Free Solder Charge

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

**K:**
–K = Polyimide film Pick & Place Pad

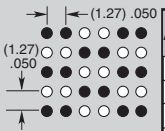
**TR:**
–TR = Tape & Reel

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




| 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 |
|---|---|
| 50x10 | 125 |
| 50x8 | 100 |
| 40x10 | 100 |
| 40x8 | 80 |
| 40x6 | 60 |
| 30x10 | 75 |
| 30x8 | 60 |
| 30x6 | 45 |
| 20x10 | 50 |
| 20x8 | 40 |
| 20x5 | 25 |



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