



**THE DATASHEET OF
SEAF-20-01-L-04-2-RA-K-TR**





HIGH-DENSITY OPEN-PIN-FIELD ARRAYS

(1.27 mm) .050" PITCH



PAM 4
56
G b p s

FEATURES & BENEFITS

- Maximum grounding & routing flexibility
- Up to 560 Edge Rate® contacts optimized for signal integrity performance.
- 7 mm to 40 mm stack heights
- Variety of designs and options: Right-Angle, Guide Posts, 85 Ω Elevated Risers, 85 Ω Tuned, Press-Fit and Press-Fit Right-Angle, Guide Post Field Termination Kits
- Cable mates (SEAC Series) and Jack Screw Standoffs (JSO Series) also available
- Standards: VITA 47, VITA 57.1 FMC, VITA 57.4 FMC+, VITA 74 VNX, PISMO™ 2
- Supports high-speed protocols such as Ethernet, PCI Express®, Fibre Channel & InfiniBand™
- Severe Environment Testing qualified (SEAM/SEAF); aligns with MIL-DTL-55302. Visit samtec.com/set



Solder Charges

EDGE RATE
CONTACT



(1.12 mm) .044" Nominal Wipe

MAXIMUM GROUNDING & ROUTING FLEXIBILITY



Differential Pair

Single-Ended

Power

| SERIES | INSULATOR MATERIAL | CONTACT MATERIAL | PLATING | OPERATING TEMP RANGE | CURRENT RATING | VOLTAGE RATING | LEAD-FREE SOLDERABLE |
|-----------------|-------------------------|--|----------------------------------|----------------------|-------------------------|----------------|----------------------|
| SEAM/SEAF | Black LCP | Copper Alloy | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | 2.7 A (10 pins powered) | 240 VAC | Yes |
| SEAM-RA/SEAF-RA | Black LCP | Copper Alloy | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | 1.9 A (10 pins powered) | 260 VAC | Yes |
| SEAM-GP | Black LCP | Copper Alloy | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | 2.7 A (10 pins powered) | 240 VAC | Yes |
| SEAMP/SEAFP | Natural High Temp Nylon | Copper Alloy (SEAMP) BeCu Alloy (SEAFP) | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | 1.9 A (6 pins powered) | 225 VAC | Not Available |
| SEAR | Black LCP | Hard Gold Plated | Au over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | Contact Samtec | 240 VAC | Not Available |
| SEAMI | Black LCP | Copper Alloy | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C | Not Available | Not Available | Yes |

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

(1.27 mm) .050" PITCH • SEAM/SEAF SERIES

| SERIES | POSITIONS PER ROW | LEAD STYLE | PLATING OPTION | NO. OF ROWS | SOLDER TYPE | A | K | "X" R |
|-------------------------|---|-------------------------------|--|--|---|------------------------------|--|--|
| SEAM Terminal | -10, -15, -20, -30, -40, -50 | Specify LEAD STYLE from chart | -L = 10 μ" (0.25 μm) Gold on contact area, Matte Tin on solder tail | -04 | -1 = Tin/Lead Alloy Solder Charge | -A = Alignment Pin | -K Polyimide Film Pick & Place Pad | "X" R -TR = Tape & Reel -FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) |
| SEAF Socket | SEAM & SEAF: -10 only available in -04 Row SEAM: -15 only available in -04 Row with -02.0 Lead Style, and -10 Row with any Lead Style SEAF: -15 only available in -04 or -10 Row with -5.0 Lead Style | | -S = 30 μ" (0.76 μm) Gold on contact area, Matte Tin on solder tail | -05 -06 -08 -10 | -2 = Lead-Free Solder Charge | | | |
| | | | -STL = 30 μ" (0.76 μm) Gold on contact area, Tin/Lead on solder tail | (SEAM -04, -05 & -06 Rows not available with -06.5 Lead Style) | | | | |

SEAM

Board Mates: SEAF, SEAFP
Standoffs: JSO



| LEAD STYLE | A | NO. OF ROWS | B |
|------------|--------------|-------------|--------------|
| -02.0 | (5.61) .221 | -04 | (7.06) .278 |
| -03.0 | (6.60) .260 | -05, -06 | (9.60) .378 |
| -03.5 | (7.11) .280 | -08 | (12.14) .478 |
| -06.5 | (10.16) .400 | -10 | (14.68) .578 |
| -07.0 | (10.59) .417 | | |
| -09.0 | (12.60) .496 | | |
| -11.0 | (14.61) .575 | | |

View complete specifications at: samtec.com?SEAM

ALSO AVAILABLE
See website for 14 row option.

SEAF

Board Mates: SEAM, SEAMP, SEAR, SEAMI
Standoffs: JSO



| LEAD STYLE | A | NO. OF ROWS | B |
|------------|-------------|-------------|--------------|
| -05.0 | (5.05) .199 | -04 | (5.66) .223 |
| -06.0 | (6.05) .238 | -05, -06 | (8.20) .323 |
| -06.5 | (6.55) .258 | -08 | (10.74) .423 |
| -07.5 | (7.54) .297 | -10 | (13.28) .523 |

View complete specifications at: samtec.com?SEAF

STANDARDS

VITA 47
VITA 57.1 FMC
VITA 57.4 FMC+
VITA 74 VNX
PISMO™ 2

Visit www.samtec.com/standards for more information.



| MATED HEIGHTS | | | | |
|-----------------|-----------------|---------|---------|---------|
| SEAM LEAD STYLE | SEAF LEAD STYLE | | | |
| | -05.0 | -06.0 | -06.5 | -07.5 |
| -02.0 | 7 mm | 8 mm | 8.5 mm | 9.5 mm |
| -03.0 | 8 mm | 9 mm | 9.5 mm | 10.5 mm |
| -03.5 | 8.5 mm | 9.5 mm | 10 mm | 11 mm |
| -06.5 | 11.5 mm | 12.5 mm | 13 mm | 14 mm |
| -07.0 | 12 mm | 13 mm | 13.5 mm | 14.5 mm |
| -09.0 | 14 mm | 15 mm | 15.5 mm | 16.5 mm |
| -11.0 | 16 mm | 17 mm | 17.5 mm | 18.5 mm |

Notes:
IPC-A-610F and IPC J-STD-001F Class 3 solder joint.

Severe Environment Testing qualified; aligns with MIL-DTL-55302. Visit samtec.com/set

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View SEAF-20-01-L-04-2-RA-K-TR on WIN SOURCE](#)
-  [Samtec Inc. Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management