

# ACCELERATE<sup>®</sup>HP

## EXTREME DENSITY CABLE SYSTEM

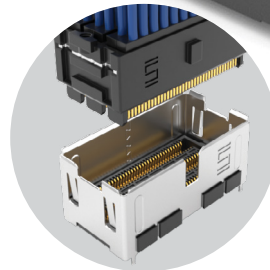
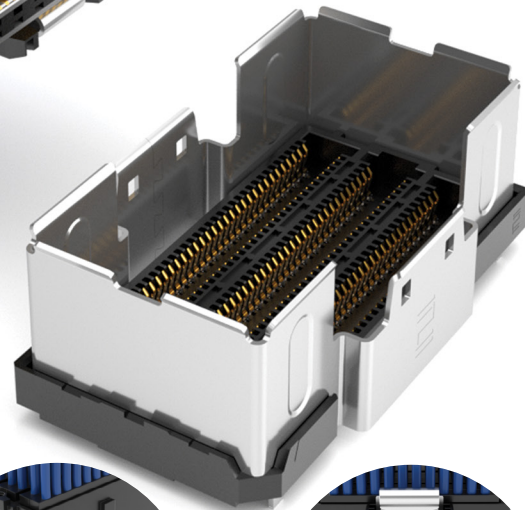
(0.635 mm) .025" PITCH

PAM4

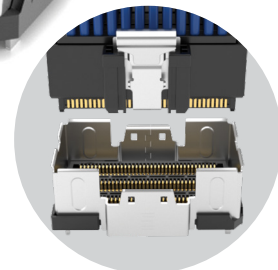
112  
G b p s

### FEATURES & BENEFITS

- Industry's highest density 112G PAM4 cable system
- Cable-to-board and cable-to-cable solutions
- 0.635 mm contact pitch; 2.20 x 2.40 mm row-to-row pitch
- 4, 6 and 8 rows; 8 or 12 pairs per row
- Up to 96 Thinax™ ultra low skew twinax cable
- Single-ended micro coax configuration
  - 34 AWG ThinSE™ micro coax cables
  - 12 or 18 coax per row
  - Dedicated G-S-G-S-G layout for reduced crosstalk
- Right-angle mating connector
- 112 Gbps PAM4 double density direct-to-chip package solution with up to 144 differential pairs and Eye Speed Thinax™ ultra low skew twinax cable (ART6/ATF6); contact [HDR@samtec.com](mailto:HDR@samtec.com) for information



Locking for maximum density  
(removal tool required)



Squeeze latching  
for quick disconnect

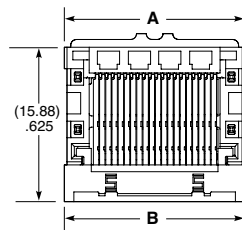
### KEY SPECIFICATIONS (ARP6)

| CABLE  | INSULATOR MATERIAL | CONTACT MATERIAL | PLATING                          | OPERATING TEMP RANGE | CURRENT RATING            | VOLTAGE RATING  |
|--|--------------------|------------------|----------------------------------|----------------------|---------------------------|-----------------|
| 34 AWG, 92 Ω Thinax™ ultra skew twinax cable | Black LCP          | Copper Alloy     | Au or Sn over 50 μ" (1.27 μm) Ni | -40 °C to +125 °C    | 1.3 A<br>(6 pins powered) | 165 VAC/233 VDC |
| 34 AWG, 50 Ω ThinSE™ micro coax cable        |                    |                  |                                  |                      |                           |                 |

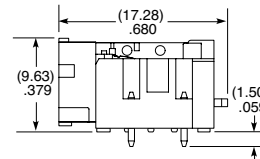
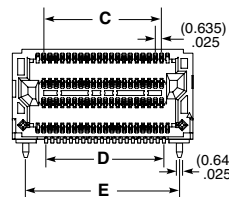
## (0.635) .025" RIGHT-ANGLE CABLE CONNECTOR

| APF6 | NO. OF POSITIONS           | PLATING OPTION  | NO. OF ROWS        | SOLDER TYPE   | RA | OPTION 1  | OPTION 2  | "X"R   |
|------|----------------------------|---|--------------------|---|----|---|---|--|
|      | -025,<br>-037<br>(Per Row) | -S<br>= 30 μ" (0.76 μm)<br>Gold on contact area,<br>Matte Tin on tail | -04<br>= Four Rows | -1<br>= Tin/Lead Alloy Solder Charge<br><br>-2<br>= Lead-Free Solder Charge |    | Leave blank for no alignment pin<br><br>-A<br>= Alignment Pin | Required option<br><br>-K<br>= (8.99 mm) .354" DIA Polymide film Pick & Place Pad<br><br>-S<br>= Mid-board shield | -TR<br>= Tape & Reel<br><br>-FR<br>= Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) |

**APF6-RA**  
Cable Mates:  
ARP6



| NO. OF POSITIONS | A             | B               | C              | D              | E             |
|------------------|---------------|-----------------|----------------|----------------|---------------|
| -025             | (21.67) .853  | (21.670) .8531  | (15.240) .6000 | (15.240) .6000 | (18.92) .745  |
| -037             | (29.29) 1.153 | (29.290) 1.1531 | (22.860) .9000 | (22.860) .9000 | (26.54) 1.045 |



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

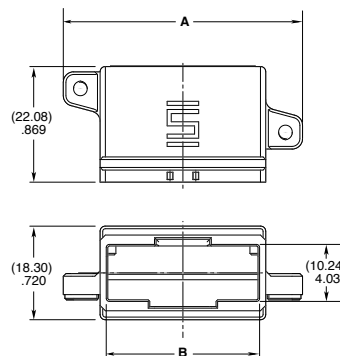
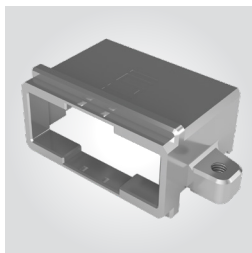
**APF6-037-S-04-2-RA SHOWN**

View complete specifications at: [samtec.com?APF6-RA](http://samtec.com?APF6-RA)

## CAGE FOR RIGHT-ANGLE CONNECTOR

| APF6 | NO. OF POSITIONS | NO. OF ROWS        | OPTION                             | 01 | C |
|------|------------------|--------------------|------------------------------------|----|---|
|      | -025, -037       | -04<br>= Four Rows | -PT1<br>= Panel End, Threaded Hole |    |   |

**APF6-C**  
Use With:  
APF6-RA



| NO. OF POSITIONS | A            | B            |
|------------------|--------------|--------------|
| -025             | (37.87) 1.49 | (21.24) .836 |
| -037             | (45.49) 1.79 | (28.86) 1.14 |

**APF6-037-04-PT1-01-C**

**Note:**  
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View complete specifications at: [samtec.com?APF6-C](http://samtec.com?APF6-C)