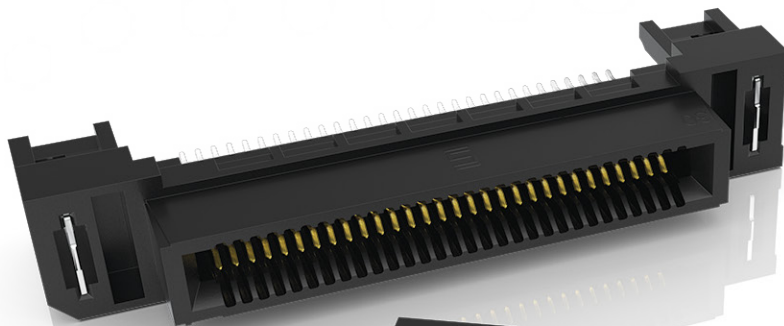


# GENERATE<sup>®</sup>

## HIGH-SPEED EDGE CARD SYSTEMS

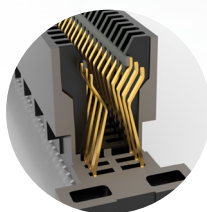
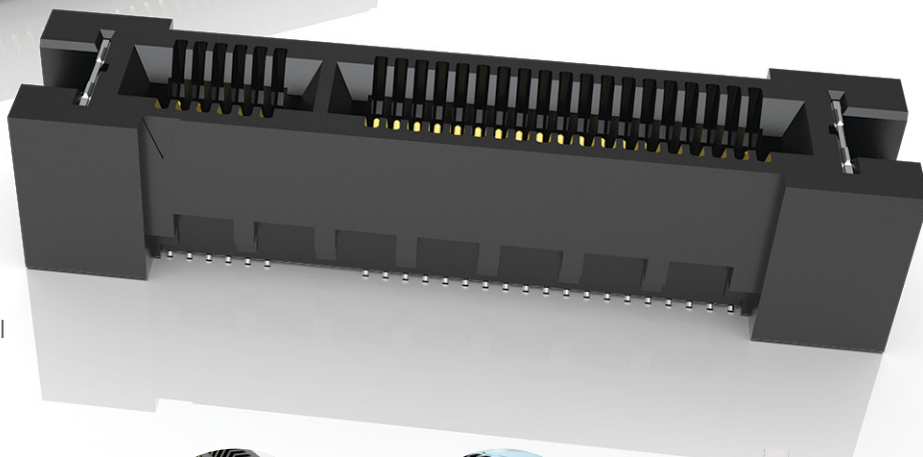
0.60 mm, 0.80 mm and 1.00 mm PITCH



**EDGE  
RATE<sup>®</sup>**  
CONTACT

### FEATURES & BENEFITS

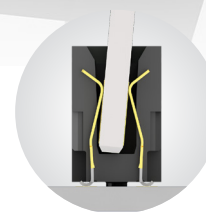
- Maximum Design Flexibility
- Up to 64 Gbps PAM4 performance
- PCI Express<sup>®</sup> 3.0, 4.0, 5.0 and 6.0
- Edge Rate<sup>®</sup> contacts optimized for signal integrity performance and high-cycle life
- Up to 200 positions available
- Vertical, right-angle, edge mount, pass-through orientations
- Power/signal combo, press-fit tails, rugged weld tabs, locks and latches
- Mating cable assemblies available



Rugged tucked beam technology (HTEC8)



Differential pair for increased speed (HSEC8-DP)



Custom designs allow for misalignment in the X-Y axes (HSEC1)

The PCI Express<sup>®</sup> design marks are registered trademarks and/or service marks of PCI-SIG.

### KEY SPECIFICATIONS

| SERIES   | PITCH   | TOTAL POSITIONS | INSULATOR MATERIAL | CONTACT MATERIAL | OPERATING TEMP RANGE | CURRENT RATING | VOLTAGE RATING  | LEAD-FREE SOLDERABLE |
|----------|---------|-----------------|--------------------|------------------|----------------------|----------------|-----------------|----------------------|
| HSEC6    | 0.60 mm | 56-168          | Black LCP          | Copper Alloy     | -55 °C to +125 °C    | 1.9 A (2 pins) | 240 VAC/339 VDC | Yes                  |
| HTEC8    | 0.80 mm | 20-200          | Black LCP          | Copper Alloy     | -55 °C to +125 °C    | 3.0 A (2 pins) | 215 VAC/304 VDC | Yes                  |
| HSEC8-DV | 0.80 mm | 18-200          | Black LCP          | BeCu             | -55 °C to +125 °C    | 2.8 A (2 pins) | 240 VAC/339 VDC | Yes                  |
| HSEC8-RA | 0.80 mm | 18-120          | Black LCP          | BeCu             | -55 °C to +125 °C    | 2.6 A (2 pins) | 175 VAC/247 VDC | Yes                  |
| HSEC8-EM | 0.80 mm | 20-120          | Black LCP          | BeCu             | -55 °C to +125 °C    | 2.8 A (2 pins) | 240 VAC/339 VDC | Yes                  |
| HSEC8-PE | 0.80 mm | 20-40           | Black LCP          | BeCu             | -55 °C to +125 °C    | 2.8 A (2 pins) | 240 VAC/339 VDC | Yes                  |
| HSEC8-PV | 0.80 mm | 40-80           | Black LCP          | BeCu             | -55 °C to +125 °C    | 3.2 A (2 pins) | 215 VAC/304 VDC | Yes                  |
| HSEC8-DP | 0.80 mm | 16-112          | Black LCP          | BeCu             | -55 °C to +125 °C    | 2.7 A (2 pins) | 235 VAC/332 VDC | Yes                  |
| HSEC1    | 1.00 mm | 20-140          | Black LCP          | Phosphor Bronze  | -55 °C to +125 °C    | 2.2 A (2 pins) | 215 VAC/304 VDC | Yes                  |

**(0.80 mm) .0315" PITCH • PASS-THROUGH & POWER COMBO**

|              |          |                          |                       |                       |           |          |           |                      |             |
|--------------|----------|--------------------------|-----------------------|-----------------------|-----------|----------|-----------|----------------------|-------------|
| <b>HSEC8</b> | <b>1</b> | <b>POSITIONS PER ROW</b> | <b>CARD THICKNESS</b> | <b>PLATING OPTION</b> | <b>DV</b> | <b>A</b> | <b>PE</b> | <b>OTHER OPTIONS</b> | <b>"X"R</b> |
|--------------|----------|--------------------------|-----------------------|-----------------------|-----------|----------|-----------|----------------------|-------------|

10, 13, 20

**-01**  
= (1.60 mm) .062" thick card

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

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

**-K**  
= (5.50 mm) .217" DIA Polyimide Film Pick & Place Pad

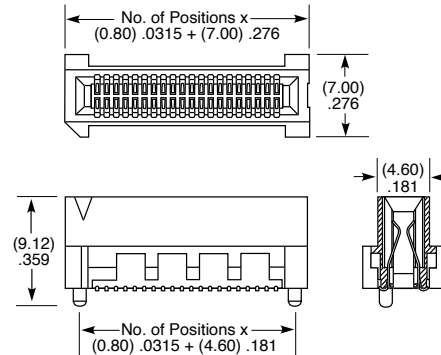
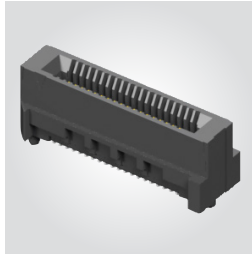
Leave blank for Tray Packaging

**-TR**  
=Tape & Reel Packaging

**-FR**  
= Full Reel Tape & Reel Packaging (Must order max. quantities per reel. Contact Samtec for parts per reel)

**HSEC8-PE**

**Card Mates:**  
(1.60 mm) .062" thick card, HSC8



**ALSO AVAILABLE**

1.00 mm High-Speed Micro Plane Socket. View complete specifications at [samtec.com?SAL1](http://samtec.com?SAL1)

View complete specifications at: [samtec.com?HSEC8-DV](http://samtec.com?HSEC8-DV)

|              |          |                         |                       |                       |           |                        |                   |                     |
|--------------|----------|-------------------------|-----------------------|-----------------------|-----------|------------------------|-------------------|---------------------|
| <b>HSEC8</b> | <b>1</b> | <b>SIGNAL POSITIONS</b> | <b>CARD THICKNESS</b> | <b>PLATING OPTION</b> | <b>PV</b> | <b>POWER POSITIONS</b> | <b>POWER TAIL</b> | <b>OTHER OPTION</b> |
|--------------|----------|-------------------------|-----------------------|-----------------------|-----------|------------------------|-------------------|---------------------|

20, 30, 40  
(Signal positions per row)

**-01**  
= (1.60 mm) .062" thick card

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

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

**-2, -4**  
(Total, 2 per power bank)

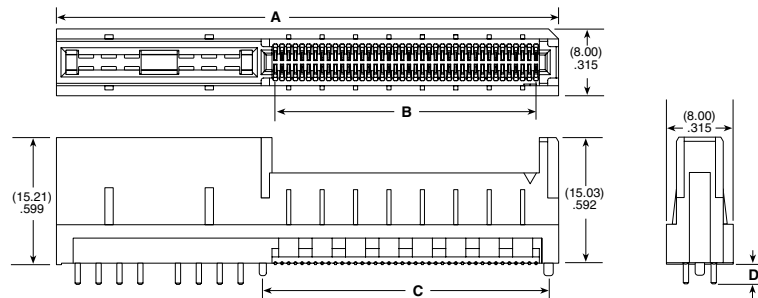
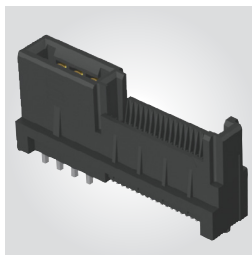
**-1**  
= Use with (1.60 mm) .062" Thick PCB

**-2**  
= Use with (2.36 mm) .093" Thick PCB

**-WT**  
= Weld Tab

**HSEC8-PV**

**Card Mates:**  
(1.60 mm) .062" thick card



| SIGNAL POSITIONS | POWER POSITIONS |               |               |               |               |               |
|------------------|-----------------|---------------|---------------|---------------|---------------|---------------|
|                  | A (-2)          | B (-2)        | C (-2)        | A (-4)        | B (-4)        | C (-4)        |
| 20               | (32.10) 1.264   | (15.20) .598  | (18.20) .717  | (44.10) 1.736 | (15.20) .598  | (18.20) .717  |
| 30               | (40.10) 1.579   | (23.20) .913  | (26.20) 1.031 | (52.10) 2.051 | (23.20) .913  | (26.20) 1.031 |
| 40               | (48.10) 1.894   | (31.20) 1.228 | (34.20) 1.346 | (60.10) 2.366 | (31.20) 1.228 | (34.20) 1.346 |

| POWER TAIL | D           |
|------------|-------------|
| -1         | (2.35) .093 |
| -2         | (3.13) .123 |

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

View complete specifications at: [samtec.com?HSEC8-PV](http://samtec.com?HSEC8-PV)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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