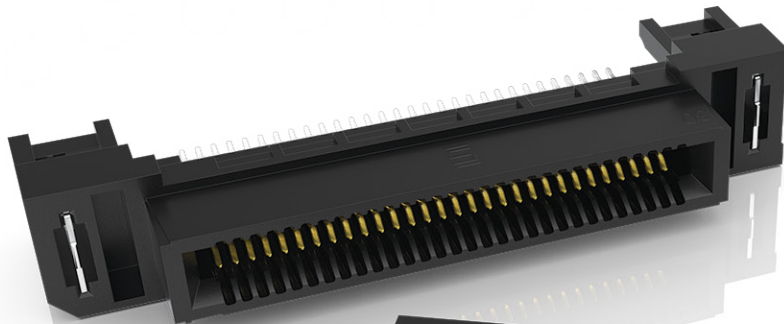# GENERATE®

HIGH-SPEED EDGE CARD SYSTEMS

## 0.60 mm, 0.80 mm and 1.00 mm PITCH


EDGE RATE®
CONTACT

FEATURES & BENEFITS

- Maximum Design Flexibility
- Up to 64 Gbps PAM4 performance
- PCI Express® 3.0, 4.0, 5.0 and 6.0
- Edge Rate® 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

The PCI Express® design marks are registered trademarks and/or service marks of PCI-SIG.
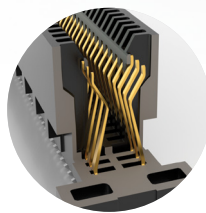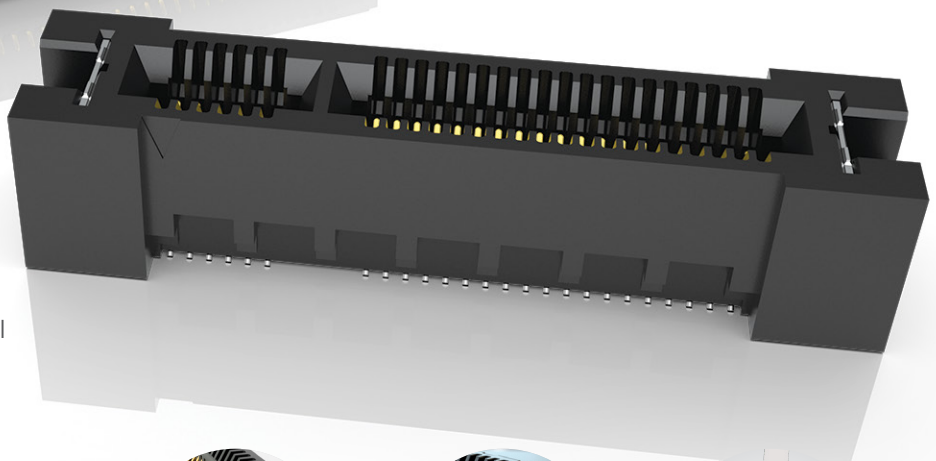
Rugged tucked beam technology (HTEC8)
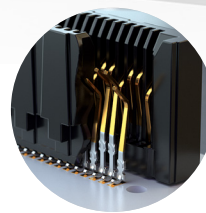
Differential pair for increased speed (HSEC8-DP)
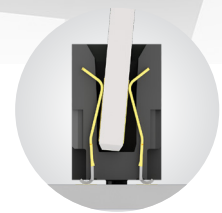
Custom designs allow for misalignment in the X-Y axes (HSEC1)

KEY SPECIFICATIONS

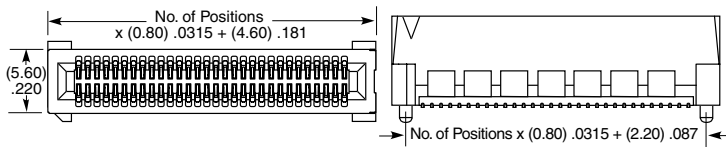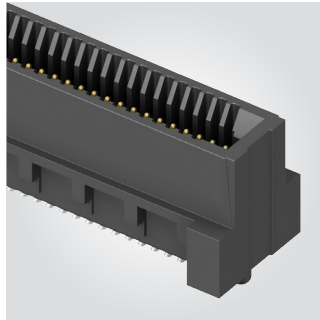| SERIES	PITCH	TOTAL POSITIONS	INSULATOR MATERIAL	CONTACT MATERIAL	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING	LEAD-FREE SOLDERABLE
HSEC6	0.60 mm	56-168	Black LCP	Copper Alloy	-55 °C to +125 °C	1.9 A (2 pins)	240 VAC/339 VDC	Yes
HTEC8	0.80 mm	20-200	Black LCP	Copper Alloy	-55 °C to +125 °C	3.0 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 • VERTICAL EDGE CARD SOCKET

HSEC8	–	1	POSITIONS PER ROW	–	CARD THICKNESS	–	PLATING OPTION	–	DV	–	A	–	OTHER OPTIONS	–	"X"R

POSITIONS PER ROW
09, 10, 13, 20, 25, 30, 37, 40, 49, 50, 60, 70, 80, 100
(13, 25, 49 only available with -L or -L2 latching option; 09 only available with -L2 option; 37 only available with -L latching option)

CARD THICKNESS
–01 = (1.60 mm) .062" thick card
–03 = (2.36 mm) .093" thick card

PLATING OPTION
–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

OTHER OPTIONS
–K = Polyimide Pick & Place Pad
–BL = Board Locks; –01 card only (Weld tab standard)
–L = Latching Option; –01 card only (13, 25, 37, 49 only) (Weld tab standard)
–L2 = ECDP Latching; –01 card only (09, 13, 25, 49 only) (For use with ECDP) (Weld tab standard)
–WT = Weld tab

"X"R
Leave blank for Tray Packaging
–TR = Tape & Reel (09 - 70 only)
–FR = Full Reel Tape & Reel (must order max. quantities per reel; contact Samtec for quantity breaks) (09-70 only)
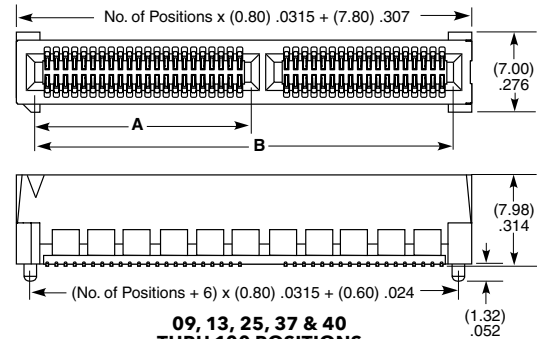
HSEC8-DV

Card Mates:
(1.60 mm) .062" card,
(2.36 mm) .093" card,
HSC8

Cable Mates:
ECDP

No. of Positions x (0.80) .0315 + (4.60) .181
(5.60) .220
No. of Positions x (0.80) .0315 + (2.20) .087
10, 20, & 30 POSITIONS

No. of Positions x (0.80) .0315 + (7.80) .307
(7.00) .276
A
B
(7.98) .314
(No. of Positions + 6) x (0.80) .0315 + (0.60) .024
(1.32) .052
09, 13, 25, 37 & 40 THRU 100 POSITIONS

OTHER SOLUTIONS

For complete edge card system with cards and sockets, visit samtec.com?RU8

For a card to mate with an HSEC8 socket, visit samtec.com?HSC8

POSITIONS PER ROW	A	B
09*†	(4.50) .177	(11.80) .465
13*†	(6.10) .240	(15.00) .591
25*†	(6.10) .240	(24.60) .969
37†	(18.10) .713	(34.20) 1.346
40	(18.90) .744	(36.60) 1.441
49*†	(22.90) .902	(43.80) 1.724
50	(22.90) .902	(44.60) 1.756
60	(26.90) 1.059	(52.60) 2.071
70†	(26.90) 1.059	(60.60) 2.386
80†	(26.90) 1.059	(68.60) 2.701
100†	(26.90) 1.059	(84.60) 3.331

CABLE	CONNECTOR
ECDP-04	HSEC8-109-L2
ECDP-08	HSEC8-113-L2
ECDP-16	HSEC8-125-L2
ECDP-32	HSEC8-149-L2

Positions where no dimensions are given do not have keying feature.

* Mates with ECDP Series

† Available with -01 Card Only

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

View complete specifications at: **samtec.com?HSEC8-DV**