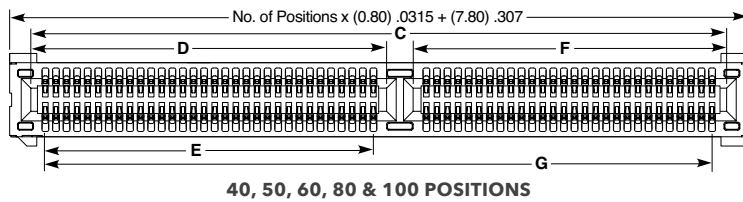


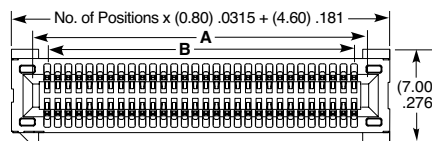
(0.80 mm) .0315" PITCH • RUGGED HIGH-SPEED EDGE CARD SOCKET

| HTEC8 | 1 | POSITIONS PER ROW | 01 | PLATING OPTION | DV | OPTION | OTHER OPTIONS |
|-------|---|------------------------------------|----|--|----|--|--|
| | | 20, 30, 40, 50, 60, 80, 100 | | -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 | | Leave blank for no alignment pin -A = Alignment Pin -WT = Weld Tab (-A option required) | -K = (7.00 mm) .276" DIA Polyimide Pick & Place Pad -TR = Tape & Reel (20 thru 60 positions only) (Leave blank for tray) -FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) (20 thru 60 positions only) (Leave blank for tray) |

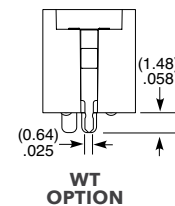
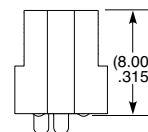
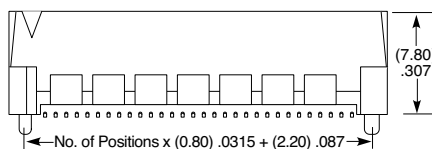
HTEC8
Card Mates:
(1.60 mm) .062" thick card



| POSITIONS PER ROW | C | D | E | F | G |
|-------------------|---------------|---------------|--------------|---------------|---------------|
| 40 | (36.60) 1.440 | (18.90) .744 | (16.80) .661 | (15.70) .618 | (34.40) 1.354 |
| 50 | (44.60) 1.756 | (22.90) .902 | (20.80) .819 | (19.70) .776 | (42.40) 1.669 |
| 60 | (52.60) 2.071 | (26.90) 1.059 | (24.80) .976 | (23.70) .933 | (50.40) 1.984 |
| 80 | (68.60) 2.701 | (26.90) 1.059 | (24.80) .976 | (39.70) 1.563 | (66.40) 2.614 |
| 100 | (84.60) 3.331 | (26.90) 1.059 | (24.80) .976 | (55.70) 2.193 | (82.40) 3.244 |



| POSITIONS PER ROW | A | B |
|-------------------|---------------|--------------|
| 20 | (17.40) .685 | (15.20) 5.98 |
| 30 | (25.40) 1.000 | (23.20) .913 |



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

View complete specifications at: samtec.com?HTEC8

(0.80 mm) .0315" PITCH • VERTICAL EDGE CARD SOCKET

| | | | | | | | |
|--------------|------------|--------------------------|-----------------------|-----------------------|-----------|----------|----------------------|
| HSEC8 | - 1 | POSITIONS PER ROW | CARD THICKNESS | PLATING OPTION | DV | A | OTHER OPTIONS |
|--------------|------------|--------------------------|-----------------------|-----------------------|-----------|----------|----------------------|

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

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

-03
= (2.36 mm) .093" 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
= 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

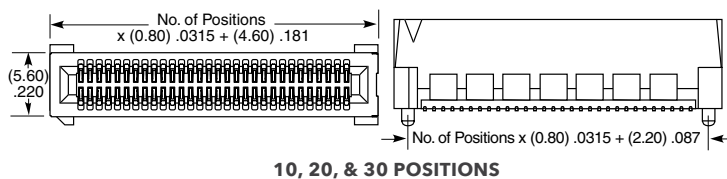
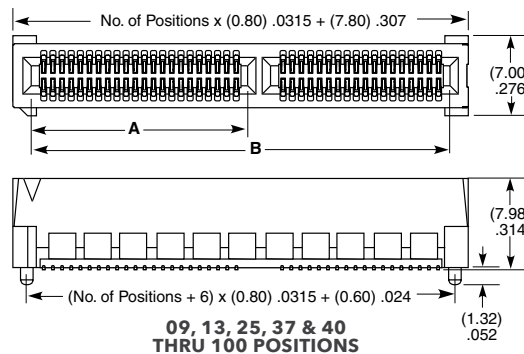
-TR
= Tape & Reel (09 - 70 only)

-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



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 | CABLE | CONNECTOR |
|-------------------|---------------|---------------|---------|--------------|
| 09*† | (4.50) .177 | (11.80) .465 | ECDP-04 | HSEC8-109-L2 |
| 13*† | (6.10) .240 | (15.00) .591 | ECDP-08 | HSEC8-113-L2 |
| 25*† | (6.10) .240 | (24.60) .969 | ECDP-16 | HSEC8-125-L2 |
| 37† | (18.10) .713 | (34.20) 1.346 | ECDP-32 | HSEC8-149-L2 |
| 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 | | |

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

(0.80 mm) .0315" PITCH • RIGHT-ANGLE & EDGE MOUNT SOCKET

| | | | | | | | |
|--------------|----------|--------------------------|-----------------------|-----------------------|-----------|----------------------|-------------|
| HSEC8 | 1 | POSITIONS PER ROW | CARD THICKNESS | PLATING OPTION | RA | OTHER OPTIONS | "X"R |
|--------------|----------|--------------------------|-----------------------|-----------------------|-----------|----------------------|-------------|

09, 10, 13, 20,
25, 30, 40, 49,
50, 60

-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

-BL
= Board Locks (09, 13,
25, 40, 49, 50, 60 only)

-L2
= ECDP Latching
(09, 13, 25, 49 only)

Leave blank for
Tray Packaging

-TR
= Tape & Reel

-FR
= Full Reel
Tape & Reel Packaging
(must order max.
quantity per reel;
contact Samtec for
quantity breaks)

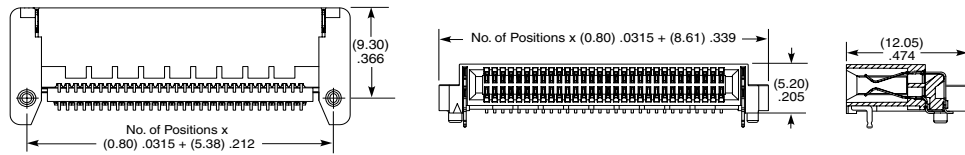
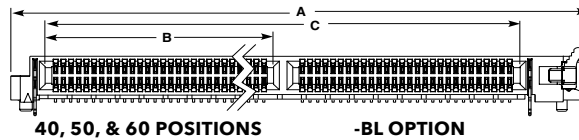
HSEC8-RA

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

Cable Mates:
ECDP



| POSITIONS PER ROW | A | B | C |
|-------------------|---------------|---------------|---------------|
| 40 | (43.80) 1.724 | (18.90) .744 | (36.60) 1.441 |
| 50 | (51.80) 2.039 | (22.90) .902 | (44.60) 1.756 |
| 60 | (59.80) 2.354 | (26.90) 1.059 | (52.60) 2.071 |
| 40-BL | (51.30) 2.020 | (18.90) .744 | (36.60) 1.441 |
| 50-BL | (59.30) 2.335 | (22.90) .902 | (44.60) 1.756 |
| 60-BL | (67.30) 2.650 | (26.90) 1.059 | (52.60) 2.071 |



View complete specifications at: samtec.com?HSEC8-RA

| | | | | | | |
|--------------|----------|--------------------------|-----------|-----------------------|----------|------------|
| HSEC8 | 1 | POSITIONS PER ROW | 01 | PLATING OPTION | D | EM2 |
|--------------|----------|--------------------------|-----------|-----------------------|----------|------------|

10, 20, 30, 40,
50, 60

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

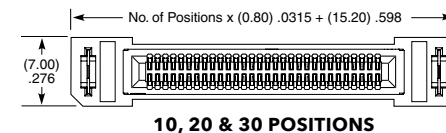
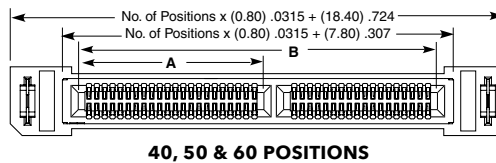
-S
= 30 μ" (0.76 μm)
Gold on contact area,
Matte Tin on tail

-EM2
=(1.60 mm) .062"
thick PCB

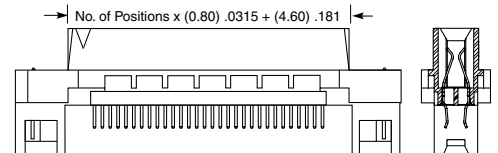
HSEC8-EM

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

Cable Mates:
ECDP



| POSITIONS PER ROW | A | B |
|-------------------|---------------|---------------|
| 40 | (18.90) .744 | (36.60) 1.441 |
| 50 | (22.90) .902 | (44.60) 1.756 |
| 60 | (26.90) 1.059 | (52.60) 2.071 |



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

View complete specifications at: samtec.com?HSEC8-EM

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

| | | | | | | | | |
|--------------|----------|--------------------------|-----------------------|-----------------------|-----------|----------|-----------|----------------------|
| HSEC8 | 1 | POSITIONS PER ROW | CARD THICKNESS | PLATING OPTION | DV | A | PE | OTHER OPTIONS |
|--------------|----------|--------------------------|-----------------------|-----------------------|-----------|----------|-----------|----------------------|

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

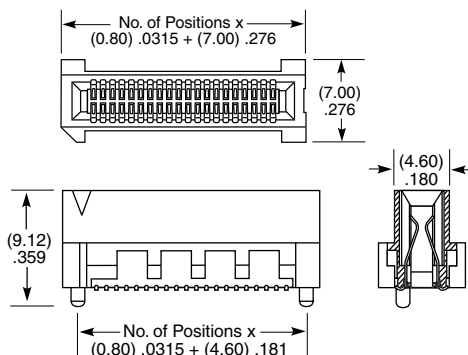
-K
= (5.50 mm) .217" DIA Polyimide Film Pick & Place Pad

-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



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

| | | | | | | | | |
|--------------|----------|-------------------------|-----------------------|-----------------------|-----------|------------------------|-------------------|---------------------|
| HSEC8 | 1 | SIGNAL POSITIONS | CARD THICKNESS | PLATING OPTION | PV | POWER POSITIONS | POWER TAIL | OTHER OPTION |
|--------------|----------|-------------------------|-----------------------|-----------------------|-----------|------------------------|-------------------|---------------------|

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)

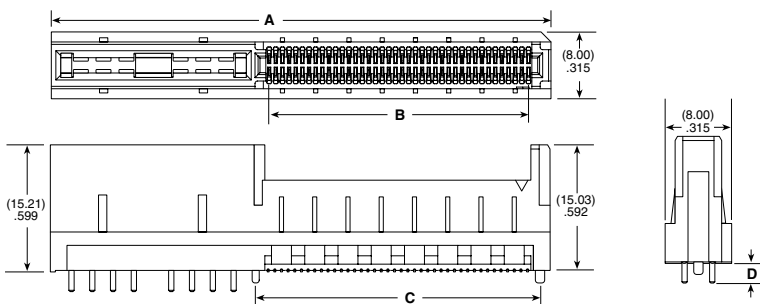
-1
= Use with (1.60 mm) .062" Thick PCB

-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 | | | | | | POWER TAIL | D |
|------------------|-----------------|---------------|---------------|---------------|---------------|---------------|------------|-------------|
| | 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 | -1 | (2.35) .093 |
| 30 | (40.10) 1.579 | (23.20) .913 | (26.20) 1.031 | (52.10) 2.051 | (23.20) .913 | (26.20) 1.031 | -2 | (3.13) .123 |
| 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 | | |

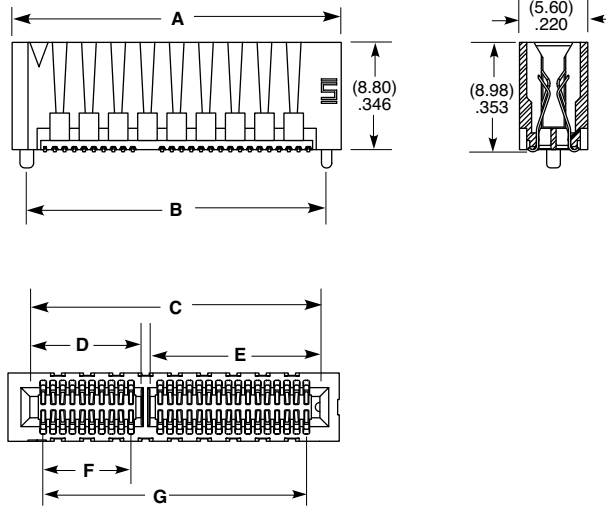
Note:
Some sizes, styles and options are non-standard, non-returnable.

View complete specifications at: samtec.com?HSEC8-PV

0.80 mm (.0315") PITCH • DIFFERENTIAL PAIR EDGE CARD

| | | | | | | | | | |
|--------------|----------|--|-----------|---|-----------|----------|---|---|--|
| HSEC8 | 1 | NUMBER OF PAIRS | 01 | PLATING OPTION | DP | A | OPTION | K | "X"R |
| | | 08, 12, 16, 20, 32, 56 (Total Pairs) | | -L = 10 μ" (0.25 μm) Gold on contact area, Matte Tin on tail | | | Leave blank for weld tab -WT = Weld Tab | -K = (6.25 mm) .246" DIA Polyimide Film Pick & Place Pad | Leave blank for Tape & Reel -FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) |

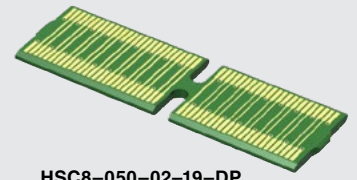
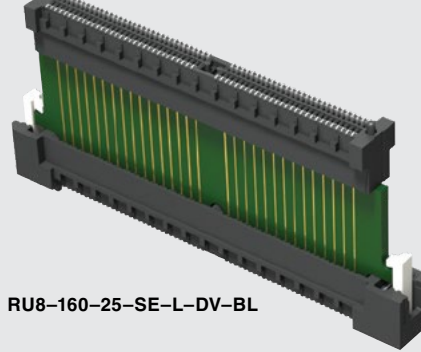
HSEC8-DP
Card Mates:
(1.60 mm) .062"
thick card



| NUMBER OF PAIRS | A | B | C | D | E | F | G |
|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 08 | (17.40) .685 | (15.00) .591 | (14.20) .559 | (4.34) .171 | (9.14) .360 | (2.40) .094 | (12.00) .472 |
| 12 | (22.20) .874 | (19.80) .780 | (19.00) .748 | (6.74) .265 | (11.54) .454 | (4.80) .189 | (16.80) .661 |
| 16 | (27.00) 1.063 | (24.60) .969 | (23.80) .937 | (9.14) .360 | (13.94) .549 | (7.20) .283 | (21.60) .850 |
| 20 | (31.80) 1.252 | (29.40) 1.157 | (28.60) 1.126 | (11.54) .454 | (16.34) .643 | (9.60) .378 | (26.40) 1.039 |
| 32 | (46.20) 1.819 | (43.80) 1.724 | (43.00) 1.693 | (18.74) .738 | (23.54) .927 | (16.80) .661 | (40.80) 1.606 |
| 56 | (75.00) 2.953 | (72.60) 2.858 | (71.80) 2.827 | (33.14) 1.305 | (37.94) 1.494 | (31.20) 1.228 | (69.60) 2.740 |

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

View complete specifications at: samtec.com?HSEC8-DP



HSC8-050-02-19-DP

RU8-160-25-SE-L-DV-BL

RU8, HSC8 SERIES

(0.80 mm) .0315"

HIGH-SPEED RISER CARD KIT

SPECIFICATIONS

For complete specifications and recommended PCB layouts see www.samtec.com?RU8

CONNECTOR

Insulator Material: Black LCP
Contact: BeCu
Plating: Au or Sn over 50 μm (1.27 μm) Ni
Current Rating: 3.1 A per pin (6 adjacent pins powered)
Operating Temp: -55 °C to +125 °C

PROCESSING

Lead-Free Solderable: Yes
SMT Lead Coplanarity: (0.10 mm) .004" max (40-60)
RoHS Compliant: Yes

RECOGNITIONS

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

FILE NO. E111594

Note: While optimized for 50 Ω applications, this connector with alternative signal/ground patterns may also perform well in certain 75 Ω applications.

RU8 — **1** POSITIONS PER ROW — **STACK HEIGHT** — **SIGNAL ROUTING** — **PLATING OPTION** — **DV** — **BL** — **OTHER OPTION**

40, 50, 60

Kit contains two connectors and one card. Assembly required.

-19
= (19 mm) .748"

-25
= (25 mm) .984"

-30
= (30 mm) 1.180"

-SE
= Single-Ended

-DP
= Differential Pair

-L
= 10 μm (0.25 μm) Gold on contact, Matte Tin on tail (Plating for connectors) Plating for Card is Hard Gold

-BL
= Board Locks (Bottom Socket only) (Not available on -19 stack height)

Leave blank for Trays

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

-TR
= Tape & Reel

-FR
= Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)

| NO. OF POSITIONS PER SIDE | A | B | -SE TOTAL SIGNAL LINES | -DP TOTAL SIGNAL PAIRS |
|---------------------------|---------------|---------------|------------------------|------------------------|
| 40 | (39.80) 1.567 | (51.05) 2.010 | 40 | 26 |
| 50 | (47.80) 1.882 | (59.05) 2.325 | 50 | 32 |
| 60 | (55.80) 2.197 | (67.05) 2.640 | 60 | 38 |

Note: Other Gold plating options available. Some lengths, styles and options are non-standard, non-returnable.

Mates with: HSEC8

SPECIFICATIONS

For complete specifications see www.samtec.com?HSC8

Conductor: 1/2 oz Copper
Contact Area: Hard Gold Plated
Insulator: FR-4
RoHS Compliant: Yes

HSC8 — **NUMBER OF POSITIONS PER SIDE** — **CARD STYLE** — **STACK HEIGHT** — **SIGNAL ROUTING**

-040, -050, -060

-02
= (1.60 mm) .062" thick card

-19
= (19 mm) .748"

-25
= (25 mm) .984"

-30
= (30 mm) 1.180"

-SE
= Single-Ended

-DP
= Differential Pair

| STACK HEIGHT | A |
|--------------|---------------|
| -19 | (14.84) .584 |
| -25 | (20.84) .820 |
| -30 | (25.84) 1.017 |

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