

(0.80 mm) .0315"

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

HSC8-050-02-19-DP

RU8, HSC8 SERIES

# HIGH SPEED RISER CARD KIT

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?RU8](http://www.samtec.com?RU8)

### Connector:

Insulator Material:

Black LCP

Contact: BeCu

Plating:

Au or Sn over

50µ" (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](http://www.samtec.com/quality)



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

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



**RU8**

**1 POSITIONS PER ROW**

40, 50, 60

**STACK HEIGHT**

-19  
= (19 mm) .748"

-25  
= (25 mm) .984"

-30  
= (30 mm) 1.180"

**SIGNAL ROUTING**

-SE  
= Single-Ended

-DP  
= Differential Pair

**PLATING OPTION**

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

**DV**

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

**OTHER OPTION**

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

-TR  
= Tape & Reel

Kit contains two connectors and one card. Assembly required.

Diagram labels: -SE, -DP, -19 Only, -BL (Required with -25 & -30)

| 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. Contact Samtec.

**Finalinch**  
CERTIFIED

| RU8<br>25 mm Stack Height   | Rated @ 3dB Insertion Loss* |
|-----------------------------|-----------------------------|
| Single-Ended Signaling      | 7.5 GHz / 15 Gbps           |
| Differential Pair Signaling | 7.5 GHz / 15 Gbps           |

\*Performance data includes effects of a non-optimized PCB. Performance data for other stack heights and complete test data available at [www.samtec.com?RU8](http://www.samtec.com?RU8) or contact [sig@samtec.com](mailto:sig@samtec.com)

Mates with:

HSEC8

## SPECIFICATIONS

For complete specifications see [www.samtec.com?HSC8](http://www.samtec.com?HSC8)

### Conductor:

1/2 oz Copper

Contact Area:

Hard Gold Plated

Insulator: FR-4

RoHS Compliant: Yes

| NO. OF POSITIONS PER SIDE | -SE TOTAL SIGNAL LINES | -DP TOTAL SIGNAL PAIRS |
|---------------------------|------------------------|------------------------|
| -040                      | 40                     | 26                     |
| -050                      | 50                     | 32                     |
| -060                      | 60                     | 38                     |

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

**HSC8**

**NUMBER OF POSITIONS PER SIDE**

-040, -050, -060

**CARD STYLE**

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

**STACK HEIGHT**

-19  
= (19 mm) .748"

-25  
= (25 mm) .984"

-30  
= (30 mm) 1.180"

**SIGNAL ROUTING**

-SE  
= Single-Ended

-DP  
= Differential Pair

No. of Positions per Side x (0.80) .0315 + (4.45) .175

Diagram labels: Signal, Ground, -SE, -DP

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