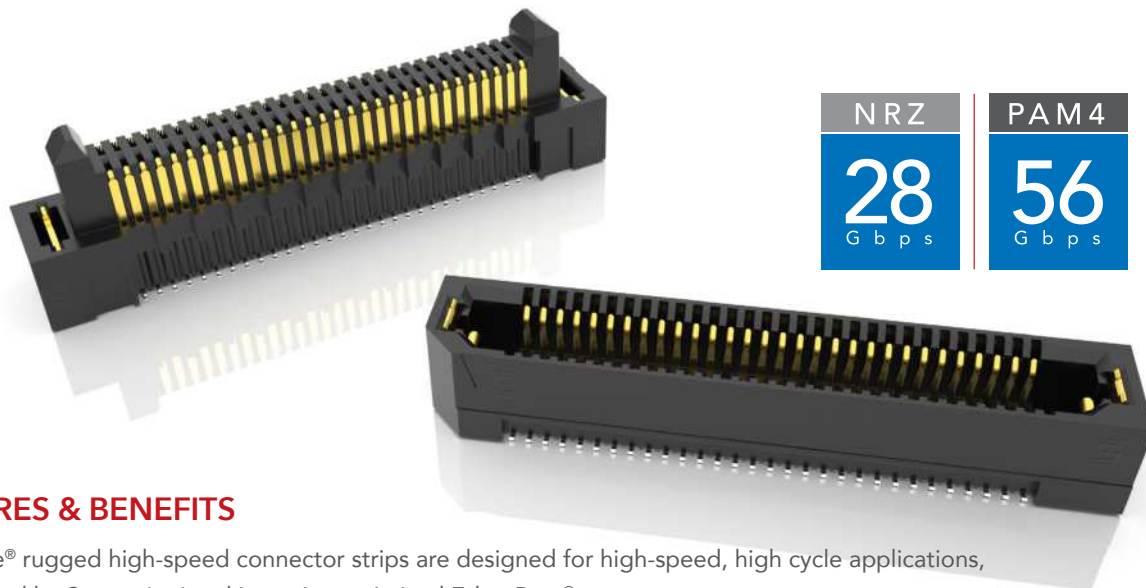


# RUGGED HIGH-SPEED STRIPS



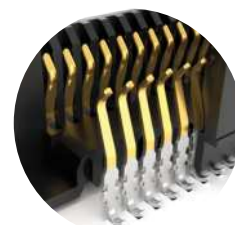
|            |            |
|------------|------------|
| NRZ        | PAM 4      |
| 28<br>Gbps | 56<br>Gbps |

## FEATURES & BENEFITS

Edge Rate® rugged high-speed connector strips are designed for high-speed, high cycle applications, and enabled by Samtec's signal integrity-optimized Edge Rate® contact system.

- Up to 1.5 mm contact wipe for a reliable connection
- 20 to 200 positions
- Choice of 0.50 mm, 0.635 mm or 0.80 mm pitch
- 0.50 mm pitch system offers up to 40% PCB space savings vs. 0.80 mm pitch
- 0.635 mm pitch system with extremely slim 2.5 mm body width
- Rugged latching, extended guide posts and 360° shielding
- Severe Environment Testing qualified (ERM8/ERF8).

Visit [samtec.com/set](http://samtec.com/set)



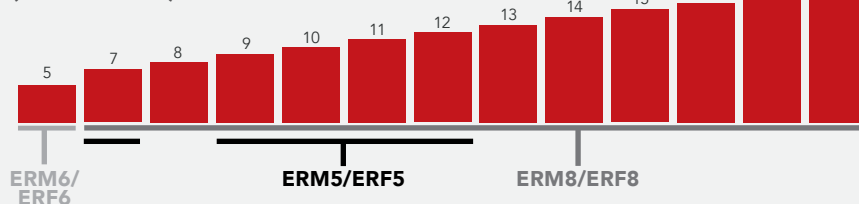
Signal integrity-optimized Edge Rate® contact system reduces broadside coupling



Rugged 360° shielding reduces EMI

## EDGE RATE® STACK HEIGHT FLEXIBILITY

(shown in mm)



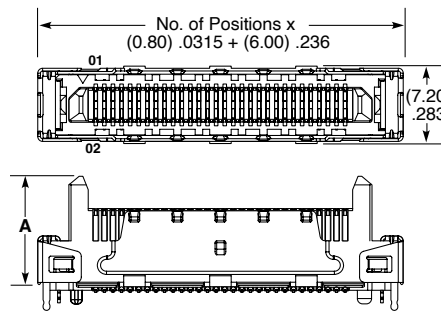
## KEY SPECIFICATIONS

| SERIES      | PITCH    | INSULATOR MATERIAL | TERMINAL MATERIAL                           | PLATING                          | OPERATING TEMP RANGE | CURRENT RATING | VOLTAGE RATING   | LEAD-FREE SOLDERABLE |
|-------------|----------|--------------------|---------------------------------------------|----------------------------------|----------------------|----------------|------------------|----------------------|
| ERM5 / ERF5 | 0.50 mm  | Black LCP          | Phosphor Bronze or BeCu (ERM5), BeCu (ERF5) | Au or Sn over 50 μ" (1.27 μm) Ni | -55 °C to +125 °C    | 1.5 A          | 190 VAC/ 269 VDC | Yes                  |
| ERM6 / ERF6 | 0.635 mm |                    | Copper Alloy                                |                                  |                      | 1.4 A          | 155 VAC/ 219 VDC |                      |
| ERM8 / ERF8 | 0.80 mm  |                    | Phosphor Bronze or BeCu (ERM8), BeCu (ERF8) |                                  |                      | 2.2 A          | 225 VAC/ 318 VDC |                      |

**(0.80 mm) .0315" PITCH • SHIELDED HIGH-SPEED HEADERS & SOCKETS**

| TYPE                               | POSITIONS PER ROW                                           | LEAD STYLE                                 | PLATING OPTION                                                       | DV | OPTIONS                                                                                                                                   | "X"R                                                                                                             |
|------------------------------------|-------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>ERM8</b><br>= Shielded Terminal | <b>-010,</b><br><b>-020,</b><br><b>-025,</b><br><b>-030</b> | <b>-02.0</b><br>= 2 mm (ERM8 with -S only) | <b>-L</b><br>= 10 μ"<br>(0.25 μm) Gold on contact, Matte Tin on tail |    | <b>-S</b><br>= Shield<br>(Lead Styles: ERM8 -02.0, -03.0, -07.0, -09.0 only; ERF8 -05.0 only)                                             | <b>-TR</b><br>= Tape & Reel                                                                                      |
| <b>ERF8</b><br>= Shielded Socket   |                                                             | <b>-03.0</b><br>= 3 mm (ERM8 with -S only) |                                                                      |    | <b>-EGPS</b><br>= Extended Guide Post Shield<br>(Lead Styles: ERM8 -05.0 & -09.0 only; ERF8 -07.0 only)                                   | <b>-FR</b><br>= Full Reel Tape & Reel (must order maximum quantity per reel; contact Samtec for quantity breaks) |
|                                    |                                                             | <b>-05.0</b><br>= 5 mm                     |                                                                      |    | <b>-DSS</b><br>= Differential Pair with Extended Guide Post Shield (ERM8 only, with -05.0 & -09.0 Lead Styles, -10 & -025 Positions only) |                                                                                                                  |
|                                    |                                                             | <b>-07.0</b><br>= 7 mm                     |                                                                      |    | <b>-K</b><br>= Polyimide Film Pick & Place Pad (-02.0 Lead Style N/A)                                                                     |                                                                                                                  |
|                                    |                                                             | <b>-09.0</b><br>= 9 mm                     |                                                                      |    | <b>-P</b><br>= Pick & Place Pad (ERM8 -02.0 & -05.0 Lead Styles only)                                                                     |                                                                                                                  |

**ERM8-S**  
Board Mates:  
See "Mated Height" Chart



| LEAD STYLE | A            | B            | C            |
|------------|--------------|--------------|--------------|
| -02.0      | N/A          | N/A          | (5.97) .235  |
| -03.0      | N/A          | N/A          | (6.97) .274  |
| -05.0      | (9.87) .389  | (10.81) .425 | (8.91) .351  |
| -09.0      | (13.87) .546 | (14.81) .583 | (12.91) .508 |

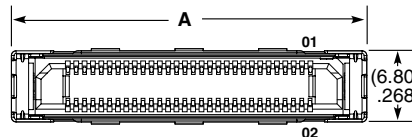
**-S OPTION      -EGPS OR -DSS OPTION**

View complete specifications at: [samtec.com?ERM8](http://samtec.com?ERM8)

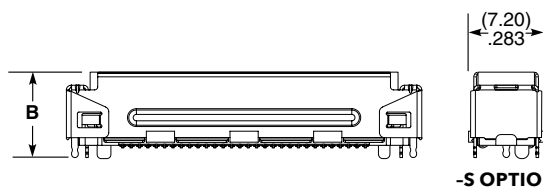
**ERF8-S**  
Board Mates:  
See "Mated Height" Chart



| MATED HEIGHTS |             |             |                |                |                |
|---------------|-------------|-------------|----------------|----------------|----------------|
| 7 mm          | 8 mm        | 10 mm       | 12 mm          | 14 mm          | 16 mm          |
| ERM8-02.0-S   | ERM8-02.0-S | ERM8-02.0-S | ERM8-05.0-EGPS | ERM8-05.0-EGPS | ERM8-09.0-EGPS |
| ERF8-05.0-S   | ERF8-05.0-S | ERF8-05.0-S | ERF8-07.0-EGPS | ERF8-05.0-S    | ERF8-07.0-EGPS |



| LEAD STYLE | B (-S)      | B (-EGPS)   |
|------------|-------------|-------------|
| -05.0      | (5.90) .232 | N/A         |
| -07.0      | N/A         | (7.42) .292 |



**-S OPTION**

| POSITIONS PER ROW | A            |
|-------------------|--------------|
| -010              | (18.00) .71  |
| -020              | (26.00) 1.02 |
| -025              | (30.00) 1.18 |
| -030              | (34.00) 1.34 |

**Notes:**  
Severe Environment Testing qualified.  
Visit [samtec.com/set](http://samtec.com/set)

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

View complete specifications at: [samtec.com?ERF8](http://samtec.com?ERF8)