

# RUGGED HIGH-SPEED STRIPS



NRZ	PAM 4
28 Gbps	56 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.

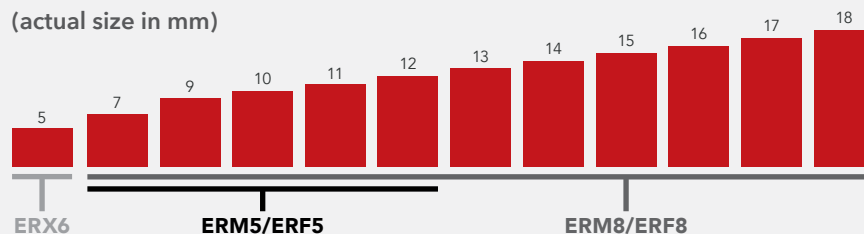
- Choice of 0.50 mm, 0.635 mm or 0.80 mm pitch
- 0.50 mm pitch system offers up to 40% PCB space savings vs. 0.80 mm pitch
- 0.635 mm pitch system with extremely slim 2.5 mm body width
- Rugged latching, locking and 360° shielding
- Up to 1.5 mm contact wipe; robust when "zippered" during unmating
- Compatible with UMPT/UMPS for power/signal flexibility

**EDGE**  
**RATE**  
CONTACT

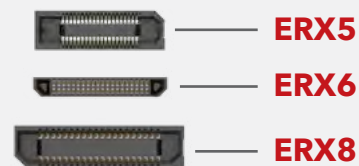


Signal integrity-optimized Edge Rate® contact system reduces broadside coupling

## EDGE RATE® STACK HEIGHT FLEXIBILITY (actual size in mm)



Sockets shown actual size with 40 total positions



## KEY SPECIFICATIONS

SERIES	PITCH	STACK HEIGHTS	TOTAL PINS / PAIRS	INSULATOR MATERIAL	TERMINAL MATERIAL	PLATING	OPERATING TEMP RANGE	LEAD-FREE SOLDERABLE
ERM5 / ERF5	0.50 mm	7-12 mm	20-150	Black LCP	Phosphor Bronze or BeCu (ERM5), BeCu (ERF5)	Au or Sn over 50 μ" (1.27 μm) Ni	-55 °C to +125 °C	Yes
ERM6 / ERF6	0.635 mm	5 mm	20-120		Copper Alloy			
ERM8 / ERF8	0.80 mm	7-18 mm	10-200		Phosphor Bronze or BeCu (ERM8), BeCu (ERF8)			

## (0.80 mm) .0315" PITCH • RUGGED HIGH-SPEED HEADERS & SOCKETS

TYPE	POSITIONS PER ROW	LEAD STYLE	PLATING OPTION	DV	OPTIONS	"X"R
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**ERM8**  
= Header

**ERF8**  
= Socket

**-005, -010, -011,  
-013, -020, -025,  
-030, -035, -040,  
-049, -050, -060,  
-070, -075, -100**

(100 Position Only Available  
with ERM8-09.0 & ERF8-05.0  
Lead Styles; -L or -EPG N/A)

**SPECIFY  
LEAD  
STYLE  
FROM  
CHART**

**-L**  
= 10  $\mu$ " (0.25  $\mu$ m) Gold on  
contact, Matte Tin on tail

**-S**  
= 30  $\mu$ " (0.76  $\mu$ m) Gold on  
contact, Matte Tin on tail

**-DS**  
= Differential Pair (ERM8 -05.0  
Lead Style with -010, -013,  
-025, -049 Positions only)

**-L**  
= Latching (ERM8-05.0 &  
-09.0 Lead Styles only & -EGP  
Option N/A) (ERF8-05.0 Lead  
Style only and -L to -EGP  
Option N/A)

**-TR**  
= Tape & Reel

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

**-EGP**  
= Extended Guide Post  
(ERM8-05.0 & ERF8-07.0 Lead  
Style Only & -L Option N/A)

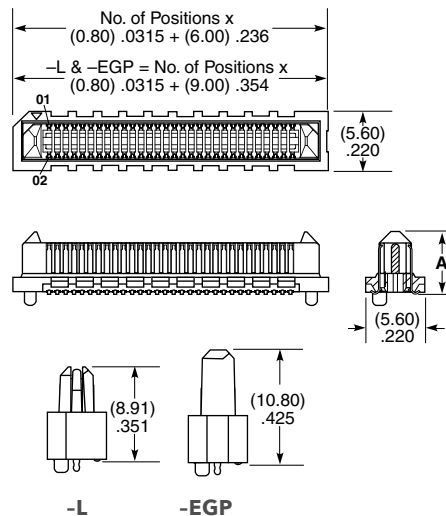
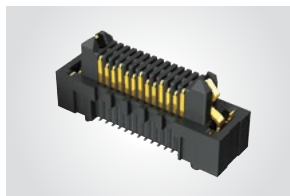
**-DSP**  
= Differential Pair with  
Extended Guide Post (ERM8  
-05.0 Lead Style with -013 and  
-025 Positions only)

**-K**  
= Polyimide Film Pick & Place  
Pad (-02.0 Lead Style N/A)

**-P**  
= Pick & Place Pad (ERM8 and  
-02.0 & -05.0 Lead Styles only)

**ERM8**  
Board Mates:  
ERF8  
ERM8

Cable Mates:  
ERCD, ERDP

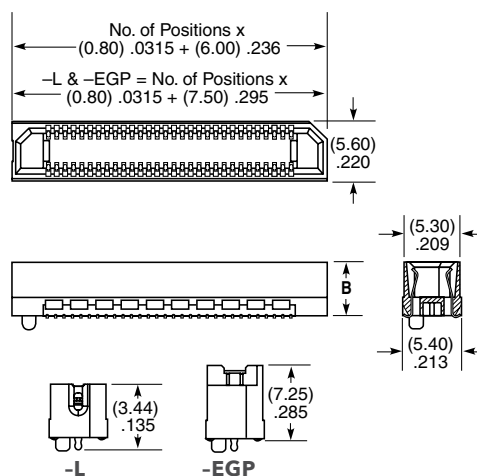
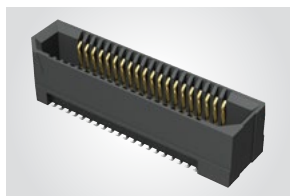


View complete specifications at: [samtec.com?ERM8](http://samtec.com?ERM8)

LEAD STYLE	A (ERM8)	B (ERF8)
-02.0	(5.97) .235	N/A
-05.0	(8.91) .351	(5.10) .200
-07.0	N/A	(7.00) .276
-08.0	(11.91) .469	N/A
-09.0	(12.91) .508	(9.00) .354

**ERF8**  
Board Mates:  
ERM8

**ERF8**  
Cable Mates:  
ERCD, ERDP



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

### MATED HEIGHT\*

ERM8 LEAD STYLE	ERF8 LEAD STYLE		
	-05.0	-07.0	-09.0
-02.0	(7.00) .276	(9.00) .354	(11.00) .433
-05.0	(10.00) .394	(12.00) .472	(14.00) .551
-08.0	(13.00) .512	(15.00) .591	(17.00) .669
-09.0	(14.00) .551	(16.00) .629	(18.00) .709

\*Processing conditions will affect mated height.

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

See pg 52-53 for Right-Angle &  
Edge Mount options, pg 54 for  
Shielded options.

# Mouser Electronics

Authorized Distributor

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Samtec:

[ERF8-025-09.0-S-DV-K-TR](#)