EDGE® RATE SYSTEM

RUGGED HIGH-SPEED STRIPS



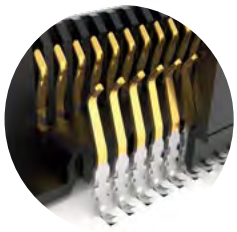
NRZ 28 Gbps | PAM4 56 Gbps

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

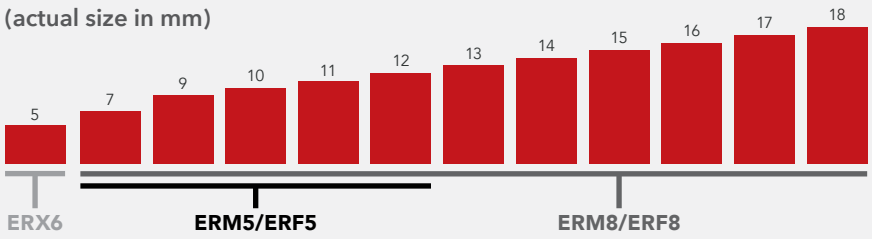
EDGE® RATE CONTACT



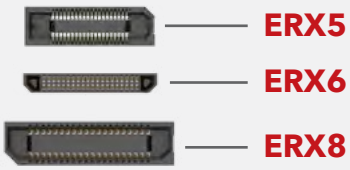
Signal integrity-optimized Edge Rate® contact system reduces broadside coupling

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)			

Unless otherwise approved in writing by Samtec, all parts and components are designed and built according to Samtec's specifications which are subject to change without notice.

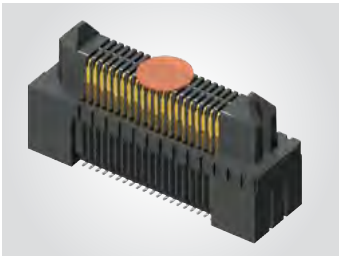
EDGE® RATE SYSTEM

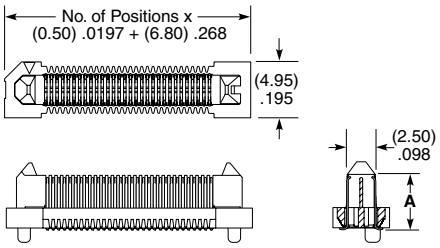
NRZ 28 Gbps

(0.50 mm) .0197" PITCH • RUGGED HIGH-SPEED STRIPS

SERIES	POSITIONS PER ROW	LEAD STYLE	PLATING OPTION	DV	PICK & PLACE PAD	"X"R
ERM5 Header **ERF5** Socket	**–010, –020, –030, –040, –050, –060, –070, –075**	**–02.0** = 2 mm Body Height (ERM5 only) **–04.0** = 4 mm Body Height (ERM5 only) **–05.0** = 5 mm Body Height **–07.0** = 7 mm Body Height (ERF5 only & Available up to 50 Pos. only)	**–L** = 10 µ" (0.25 µm) Gold on contact, Matte Tin on Tail		(required in callout) **–K** = (3.50 mm) .138" DIA Polyimide Film Pick & Place Pad (ERM5 –04.0 –05.0 and Lead Style only) = (6.00 mm) .236" DIA Polyimide Film Pick & Place Pad (ERF5 only) **–P** = Plastic Pick & Place Pad (ERM5 –02.0 Lead Style only; ERM5 –010 Postions and ERF5 Not Available)	**–TR** = Tape & Reel **–FR** = Full Reel Tape & Reel (must order maximum quantity per reel; contact Samtec for quantity breaks)

ERM5
Board Mates:
ERF5

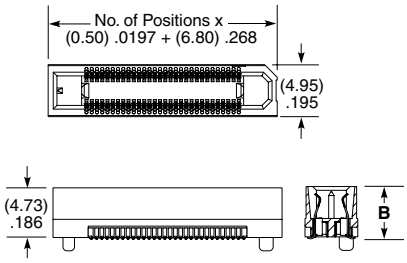




LEAD STYLE	A (ERM5)	B (ERF5)
–02.0	(4.84) .191	N/A
–04.0	(6.84) .269	N/A
–05.0	(7.84) .309	(4.91) .193
-07.0	N/A	(6.91) .272

ERF5
Board Mates:
ERM5





MATED HEIGHT*		
ERM5 LEAD STYLE	ERF5 LEAD STYLE	
	-05.0	-07.0
-02.0	(7.00) .276	(9.00) .354
-04.0	(9.00) .354	(11.00) .433
-05.0	(10.00) .394	(12.00) .472

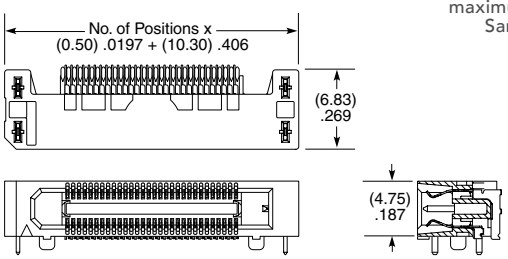
*Processing conditions will affect mated height.

View complete specifications at: **samtec.com?ERM5 or samtec.com?ERF5**

ERF5	POSITIONS PER ROW	01	PLATING OPTION	D	RA	"X"R
Right-Angle Socket	**–010, –020, –030, –040, –050**		**–L** = 10 µ" (0.25 µm) Gold on contact, Matte Tin on tail			**–TR** = Tape & Reel **–FR** = Full Reel Tape & Reel (must order maximum quantity per reel; contact Samtec for quantity breaks)

ERF5-RA
Board Mates:
ERM5





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

View complete specifications at: **samtec.com?ERF5-RA**

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