

ERF5-050-01-L-D-RA-TR

ERF5-010-01-L-D-RA-TR

ERF5-010-05.0-L-DV-K-TR

(0.50 mm) .0197"

ERF5, ERF5-RA SERIES

# RUGGED HIGH-SPEED SOCKET

Mates with:  
ERM5

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?ERF5](http://www.samtec.com?ERF5) or [www.samtec.com?ERF5-RA](http://www.samtec.com?ERF5-RA)

**Insulator Material:**

Black LCP

**Terminal Material:**

BeCu

**Plating:**

Au or Sn over

50  $\mu$ " (1.27  $\mu$ m) Ni

**Current Rating (-DV to -DV):**

1.5 A per pin

(2 pins powered)

**Current Rating (-DV to -RA):**

1.6 A per pin

(2 pins powered)

**Operating Temp Range:**

-55 °C to +125 °C

**Voltage Rating:**

194 VAC mated with ERM5

**RoHS Compliant:**

Yes

## PROCESSING

**Lead-Free Solderable:**

Yes

**SMT Lead Coplanarity:**

(0.10 mm) .004" max (010-040)

(0.13 mm) .005" max (050-075)

## RECOGNITIONS

For complete scope of recognitions see [www.samtec.com/quality](http://www.samtec.com/quality)



FILE NO. E111594

## ALSO AVAILABLE (MOQ Required)

- Friction Lock (-DV only)
  - Weld Tab (-DV only)
  - Other platings
- Contact Samtec.

### MATED HEIGHT\*

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

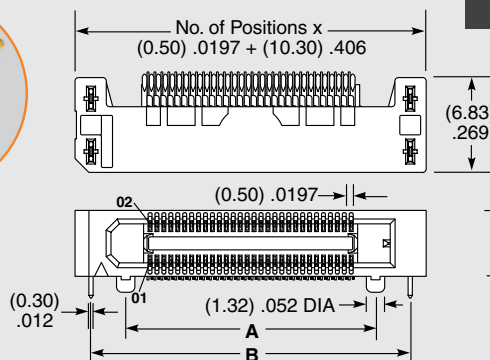
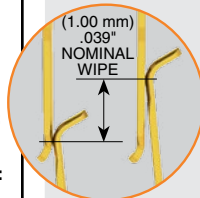
\*Processing conditions will affect mated height.

**Notes:**

Patented

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

ERF5	NO. OF POSITIONS PER ROW	01	PLATING OPTION	D	RA	TR
-010, -020, -030, -040, -050						
-L = 10 $\mu$ " (0.25 $\mu$ m) Gold on contact, Matte Tin on tail						
-TR = Tape & Reel Packaging						



### HIGH-SPEED CHANNEL PERFORMANCE

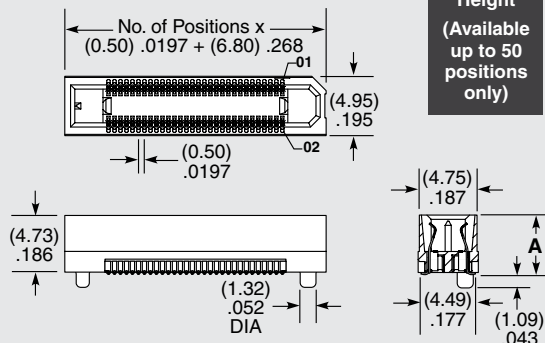
ERM5/ERF5 @ 7 mm Mated Stack Height

Rating based on Samtec reference channel.  
For full SI performance data visit [Samtec.com](http://Samtec.com)  
or contact [SIG@samtec.com](mailto:SIG@samtec.com)

28  
Gbps

NO. OF POSITIONS	A	B
-010	(8.00) .315	(13.00) .512
-020	(13.00) .512	(18.00) .709
-030	(18.00) .709	(23.00) .906
-040	(23.00) .906	(28.00) 1.102
-050	(28.00) 1.102	(33.00) 1.299

ERF5	NO. OF POSITIONS PER ROW	LEAD STYLE	PLATING OPTION	DV	K	TR
-010, -020, -030, -040, -050, -060, -070, -075						
-05.0 = 5 mm Body Height						
-07.0 = 7 mm Body Height (Available up to 50 positions only)						
-L = 10 $\mu$ " (0.25 $\mu$ m) Gold on contact, Matte Tin on tail						
-K = (6.00 mm) .236" DIA Polyimide Film Pick & Place Pad						
-TR = Tape & Reel Packaging						



LEAD STYLE	A
-05.0	(4.91) .193
-07.0	(6.91) .272

### POWER/SIGNAL APPLICATION



Compatible with UMPT/UMPS for flexible two-piece power/signal solutions

Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)

All parts within this catalog are built to Samtec's specifications.

Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.