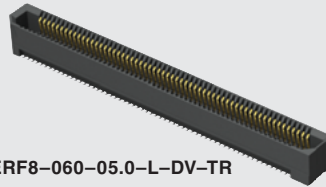
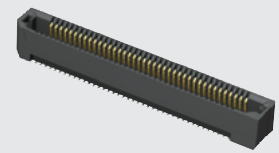




ERF8-020-05.0-S-DV-TR



ERF8-060-05.0-L-DV-TR



ERF8-040-05.0-S-DV-TR

ERF8 SERIES

(0,80 mm) .0315"

# RUGGED HIGH SPEED SOCKET

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?ERF8](http://www.samtec.com?ERF8)

**Insulator Material:** Black LCP  
**Contact Material:** BeCu  
**Plating:** Au or Sn over 50µ" (1,27 µm) Ni  
**Current Rating:** 2.2 A per pin (1 pin powered per row)  
**Operating Temp Range:** -55°C to + 125°C  
**Voltage Rating:** 200 VAC max  
**RoHS Compliant:** Yes

**Processing:**  
**Lead-Free Solderable:** Yes  
**SMT Lead Coplanarity:**  
 (0,10 mm) .004" max (005-030)  
 (0,12 mm) .005" max (040-060)  
 (0,15 mm) .006" max (070-075)

## RECOGNITIONS

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



FILE NO. E111394

**Protocols Supported**

100 GbE  
PCI Express®

Download app notes at [www.samtec.com/appnote](http://www.samtec.com/appnote)  
 Contact SIG @ samtec.com for questions on protocols

**Board Mates:**  
ERM8

**Cable Mates:**  
ERCD, ERDP

MATED HEIGHT*				
ERF8 LEAD STYLE	ERM8 LEAD STYLE			
	-02.0	-05.0	-08.0	-09.0
-05.0	(7,00) .276	(10,00) .394	(13,00) .512	(14,00) .551
-07.0	(9,00) .354	(12,00) .472	(15,00) .591	(16,00) .629

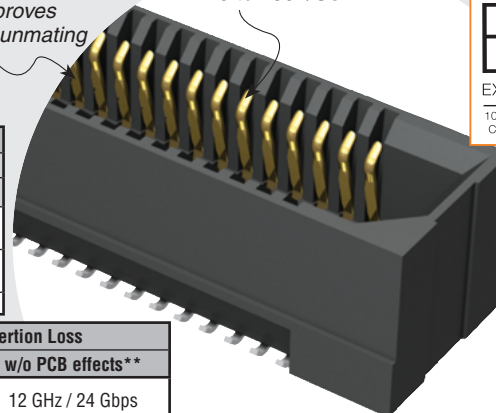
\*Processing conditions will affect mated height.

ERM8/ERF8 7 mm Stack Height	Rated @ 3dB Insertion Loss	
	with PCB effects*	w/o PCB effects**
Single-Ended Signaling	10.5 GHz / 21 Gbps	12 GHz / 24 Gbps
Differential Pair Signaling	9.5 GHz / 19 Gbps	15.5 GHz / 31 Gbps

\*Performance data includes effects of a non-optimized PCB.  
 \*\*Test board losses de-embedded from performance data.  
 Performance data for other stack heights and complete test data available at [www.samtec.com?ERF8](http://www.samtec.com?ERF8) or contact [sig@samtec.com](mailto:sig@samtec.com)

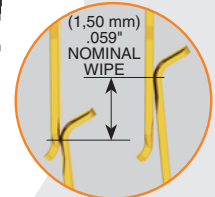
Robust Edge Rate® contact improves "Zippered" unmating

10 to 150 I/Os



**E.L.P.**  
EXTENDED LIFE PRODUCT

10 year Mixed Flowing Gas with 30µ" Gold  
 Call Samtec for maximum mated cycles



**28+**  
Gbps

CERTIFIED

ERF8	NO. OF POSITIONS PER ROW	LEAD STYLE	PLATING OPTION	DV	OTHER OPTION	TR
------	--------------------------	------------	----------------	----	--------------	----

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

-100  
(Available with -05.0 lead style only)

Specify LEAD STYLE from chart

LEAD STYLE	A
-05.0	(5,10) .200
-07.0	(7,00) .276

**-L**  
= 10µ" (0,25 µm)  
Gold on contact, Matte Tin on tail

**-S**  
= 30µ" (0,76 µm)  
Gold on contact, Matte Tin on tail

**-L**  
= Latching (Lead Style -05.0 only) (N/A with -EGP or -EGPS option)

**-EGP**  
= Extended Guide Post (Lead Style -07.0 only) (N/A with -L & -EGPS option)

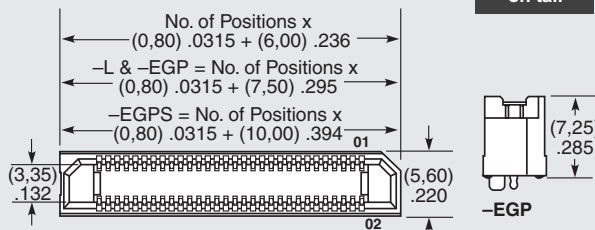
**-EGPS**  
= Extended Guide Post Shield (Lead Style -07.0 only) (N/A with -L & -EGP option) (-010, -020, -025, -030 only)

**-K**  
= (6,00 mm) .236" DIA Polyimide Film Pick & Place Pad

**-TR**  
= Tape & Reel Packaging

## APPLICATIONS

STANDARD	POS.	PART NOs.	SERIES
NEXUS5001™.org POWER.org™	10	ASP-148421-01	ERF8-DV
	11	ASP-137969-01	ERF8-DV
	17	ASP-137973-01	ERF8-DV
ARM/HSSTP	20	ASP-130367-01	ERF8-DV
	23	ASP-130368-01	ERF8-DV
NEXUS5001™.org POWER.org™	25	ASP-148422-01	ERF8-DV
	35	ASP-135029-01	ERF8-DV
	40	ASP-148424-01	ERF8-DV



## ALSO AVAILABLE (MOQ Required)

- Mezzanine stack heights Contact Samtec.

Note: Patented

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

