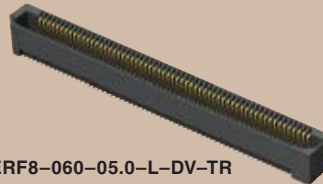




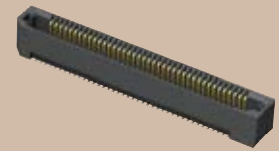
(0,80 mm) .0315"

ERF8 SERIES

ERF8-020-05.0-S-DV-TR



ERF8-060-05.0-L-DV-TR



ERF8-040-05.0-S-DV-TR

# 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:** 1.4A per contact @ 95°C (6 adjacent pins powered)  
**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)

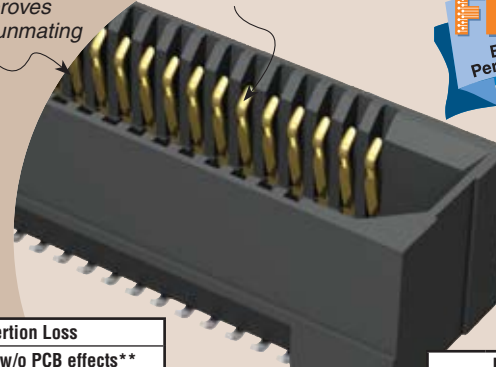
**Board Mates:** ERM8

**Cable Mates:** ERCD, ERDP



Robust Edge Rate™ contact improves "Zippered" unmating

10 to 150 I/Os



25+ Gbps

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)

ERF8 LEAD STYLE	MATED HEIGHT*			
	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.

**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

ERF8	NO. OF POSITIONS PER ROW	LEAD STYLE	PLATING OPTION	DV	OTHER OPTION	TR
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-005, -010, -013,  
-020, -025, -030,  
-040, -049, -050,  
-060, -070, -075

Specify LEAD STYLE from chart

-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

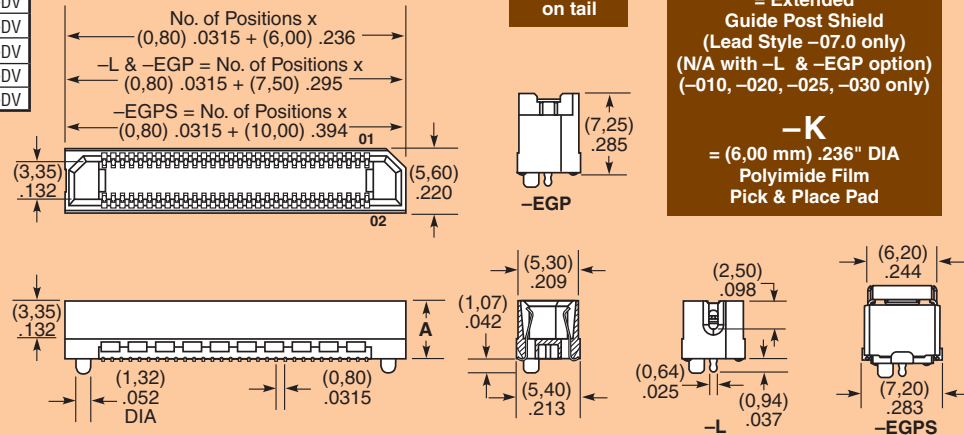
LEAD STYLE	A
-05.0	(5,10) .200
-07.0	(7,00) .276

STANDARD	POS.	PART NOS.	SERIES
NEXUS5001™.org	11	ASP-137969-01	ERF8-DV
POWER.org™	17	ASP-130368-01	ERF8-DV
ARM/HSSTP	20	ASP-130367-01	ERF8-DV
NEXUS5001™.org	23	ASP-130368-01	ERF8-DV
POWER.org™	35	ASP-135029-01	ERF8-DV

**APPLICATION SPECIFIC**

Other positions and mezzanine stack heights available.  
 Call Samtec.

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



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

WWW.SAMTEC.COM