

**ERM8-S SERIES**

**(0.80 mm) .0315"**

# RUGGED HIGH-SPEED SHIELDED HEADER

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?ERM8](http://www.samtec.com?ERM8)

**Insulator Material:**  
Black LCP

**Terminal Material:**  
Phosphor Bronze

**Plating:**  
Au or Sn over

50 μ" (1.27 μm) Ni

**Current Rating:**  
2.2 A per pin

(2 pins powered)

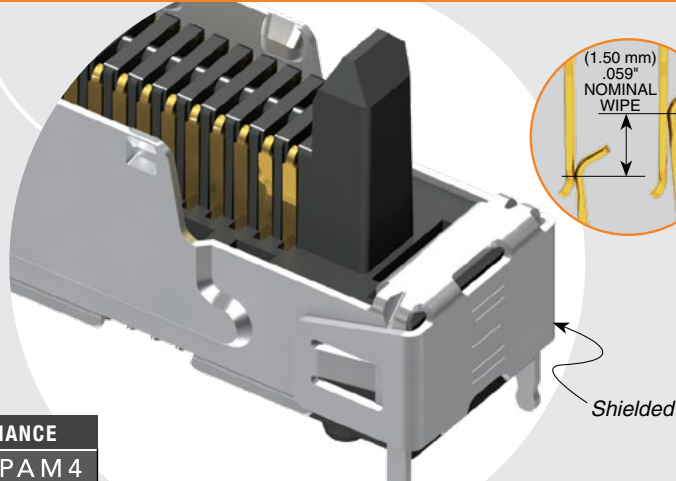
**Operating Temp Range:**  
-55 °C to +125 °C

**Voltage Rating:**  
225 VAC / 318 VDC

**RoHS Compliant:**  
Yes

## Board Mates:

See "Mated Height" Chart  
(Note: ERF8-S does not mate with ERM8-EGPS)



Shielded

## HIGH-SPEED CHANNEL PERFORMANCE

ERM8/ERF8 @ 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)

PAM 4

**56**  
Gbps

## MATED HEIGHT

7 mm	9 mm	12 mm	16 mm
ERM8-02.0-S to ERF8-05.0-S	ERM8-02.0-S to ERF8-07.0-EGPS	ERM8-05.0-EGPS to ERF8-07.0-EGPS	ERM8-09.0-EGPS to ERF8-07.0-EGPS

## PROCESSING

**Lead-Free Solderable:**  
Yes

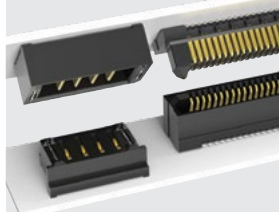
**SMT Lead Coplanarity:**  
(0.10 mm) .004" max (010-030)

## RECOGNITIONS

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



## POWER/SIGNAL APPLICATION



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

## ERM8 POSITIONS PER ROW LEAD STYLE PLATING OPTION DV OTHER OPTION TR

-010, -020,  
-025, -030

-02.0  
= 2 mm  
(-S only)

-05.0  
= 5 mm  
(-EGPS & -DSS only)

-09.0  
= 9 mm  
(-EGPS & -DSS only)

-L  
= 10 μ" (0.25 μm)  
Gold on contact,  
Matte Tin on tail

-S  
= 30 μ" (0.76 μm)  
Gold on contact,  
Matte Tin on tail

-S  
= Shield  
(-02.0 style only)

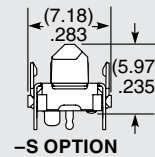
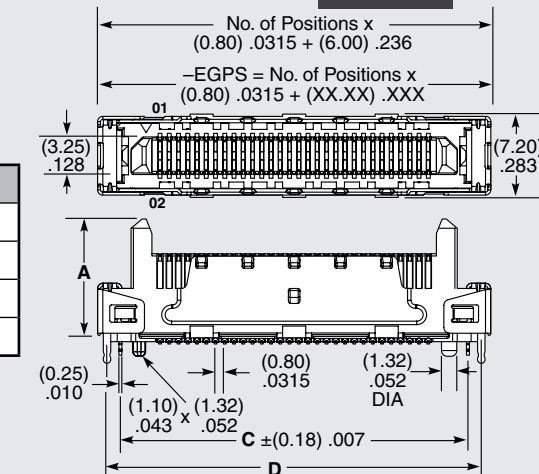
-EGPS  
= Extended Guide Post Shield  
(-05.0 & -09.0 lead style only)  
(-10 & -025 positions only)

-DSS  
= Differential Pair with Extended Guide Post Shield  
-05.0 & -09.0 lead style only  
(-10 & -025 positions only)

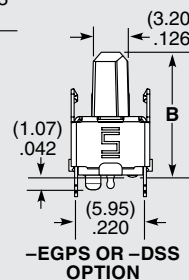
-K  
= (4.00 mm) .157" DIA Polyimide Film Pick & Place Pad  
(Not available in -02.0 lead style)

-P  
= Pick & Place Pad  
(-02.0 & -05.0 lead style only)

LEAD STYLE	A	B
-05.0	(9.87) .389	(10.81) .425
-09.0	(13.87) .546	(14.81) .583



-S OPTION



-EGPS OR -DSS OPTION

NO. OF POSITIONS	C	D
-10.0	(14.00) .551 (16.36) .644	(24.36) .959 (28.36) 1.117
-20.0	(22.00) .866 (24.36) .959	(28.36) 1.117 (32.36) 1.274
-25.0	(26.00) 1.024 (28.36) 1.117	(32.36) 1.274
-30.0	(30.00) 1.181 (32.36) 1.274	

**Notes:**  
Patented

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](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.