

(0.80 mm) .0315"

ERF8-020-05.0-S-DV-TR

ERF8-060-05.0-L-DV-TR

ERF8-040-05.0-S-DV-TR

ERF8 SERIES

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

## 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 (070-100)\*

\*(.004" stencil solution may be available; contact IPG@samtec.com)

## RECOGNITIONS

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



FILE NO. E111594

## ALSO AVAILABLE (MOQ Required)

- Mezzanine stack heights

## APPLICATIONS

| STANDARD                     | POS. | PART NOS.     | SERIES  |
|------------------------------|------|---------------|---------|
| NEXUS5001™.org<br>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 |
| NEXUS5001™.org<br>POWER.org™ | 23   | ASP-130368-01 | ERF8-DV |
|                              | 25   | ASP-148422-01 | ERF8-DV |
|                              | 35   | ASP-135029-01 | ERF8-DV |
|                              | 40   | ASP-148424-01 | ERF8-DV |

### Notes:

Patented

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

Board Mates:  
ERM8

Cable Mates:  
ERCD, ERDP



| ERF8 LEAD STYLE | MATED HEIGHT*   |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | ERM8 LEAD STYLE |                 |                 |                 |
|                 | -02.0           | -05.0           | -08.0           | -09.0           |
| -05.0           | (7.00)<br>.276  | (10.00)<br>.394 | (13.00)<br>.512 | (14.00)<br>.551 |
| -07.0           | (9.00)<br>.354  | (12.00)<br>.472 | (15.00)<br>.591 | (16.00)<br>.629 |
| -09.0           | (11.00)<br>.453 | (14.00)<br>.551 | (17.00)<br>.669 | (18.00)<br>.709 |

\*Processing conditions will affect mated height.

ERF8 ■ NO. OF POSITIONS PER ROW

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

-100  
(Available with -05.0 lead style only)

## 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 [SLG@samtec.com](mailto:SLG@samtec.com)

PAM 4

56  
Gbps

Robust Edge Rate®  
contact improves  
"Zippered"  
unmating

10 to 200 I/Os

(1.50 mm)  
.059"  
NOMINAL  
WIPE

## POWER/SIGNAL APPLICATION



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

Specify  
LEAD  
STYLE  
from  
chart

| LEAD STYLE | A              |
|------------|----------------|
| -05.0      | (5.10)<br>.200 |
| -07.0      | (7.00)<br>.276 |
| -09.0      | (9.00)<br>.354 |

-L  
= 10  $\mu$ "  
(0.25  $\mu$ m)  
Gold on  
contact,  
Matte Tin  
on tail

-S  
= 30  $\mu$ "  
(0.76  $\mu$ m)  
Gold on  
contact,  
Matte Tin  
on tail

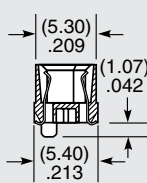
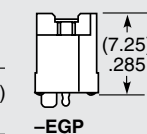
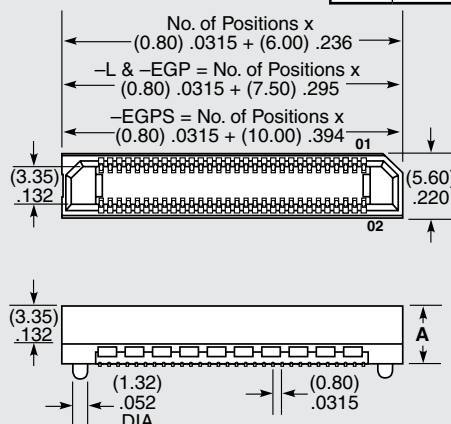
-L  
= Latching  
(Lead Style -05.0 only)  
(Not available with  
-EGP or -EGPS options)

-EGP  
= Extended Guide Post  
(Lead Style -07.0 only)  
(Not available with  
-L & -EGPS option)

-EGPS  
= Extended Guide Post Shield  
(Lead Style -07.0 only)  
(Not available with  
-L & -EGP option)  
(-010, -020, -025, -030 only)

-K  
= (6.00 mm) .236" DIA  
Polyimide Film  
Pick & Place Pad

-TR  
= Tape &  
Reel  
Packaging  
(Not  
available  
with 100  
positions)



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.