



(2.54 mm) .100"

# THROUGH-HOLE .025" SQ POST HEADER

**Board Mates:**

SSW, SSQ, SSM, ESW, ESQ, BCS, BSW, CES, SLW

**Cable Mates:**

IDSD, IDSS

**SPECIFICATIONS**

For complete specifications see [www.samtec.com?TSW](http://www.samtec.com?TSW) or [www.samtec.com?HTSW](http://www.samtec.com?HTSW)

**Insulator Material:**

TSW: Black Glass Filled Polyester

HTSW: Natural Liquid Crystal Polymer

**Terminal Material:**

Phosphor Bronze

**Plating:**

Au or Sn over 50 μm (1.27 μm) Ni

**Operating Temp Range:**

-55 °C to +125 °C with Gold

-55 °C to +105 °C with Tin

**Voltage Rating:**

550 VAC mated with SSW;

500 VAC mated with BCS or ESQ;

450 VAC -RA/-RE mated with BCS or SSM

400 VAC mated with CES

**RoHS Compliant:** Yes

**Lead-Free Solderable:**

HTSW: Yes

TSW: No, Lead Wave Only

| TYPE STRIP  | PIN CENTERS  | NO. PINS PER ROW  |
|---|--|---|
| <p><b>TSW</b> = Standard Strip</p> <p><b>HTSW</b> = Hi-Temp Strip</p> | <p><b>-1</b> = .100" (2.54 mm) Centers, All Positions Filled</p> | <p><b>-2</b> = .200" (5.08 mm) Centers, Every Other Position Filled</p> |

| CURRENT RATING (PER PIN) |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|
| TSW mated with           |       |       |       |       |       |       |
| ESW                      | SSW   | SLW   | SSQ   | SSM   | BCS   | SNT   |
| 5.2 A                    | 5.7 A | 5.2 A | 6.3 A | 5.2 A | 4.6 A | 4.3 A |
| 2 POSITIONS POWERED      |       |       |       |       |       |       |

**RECOGNITIONS**

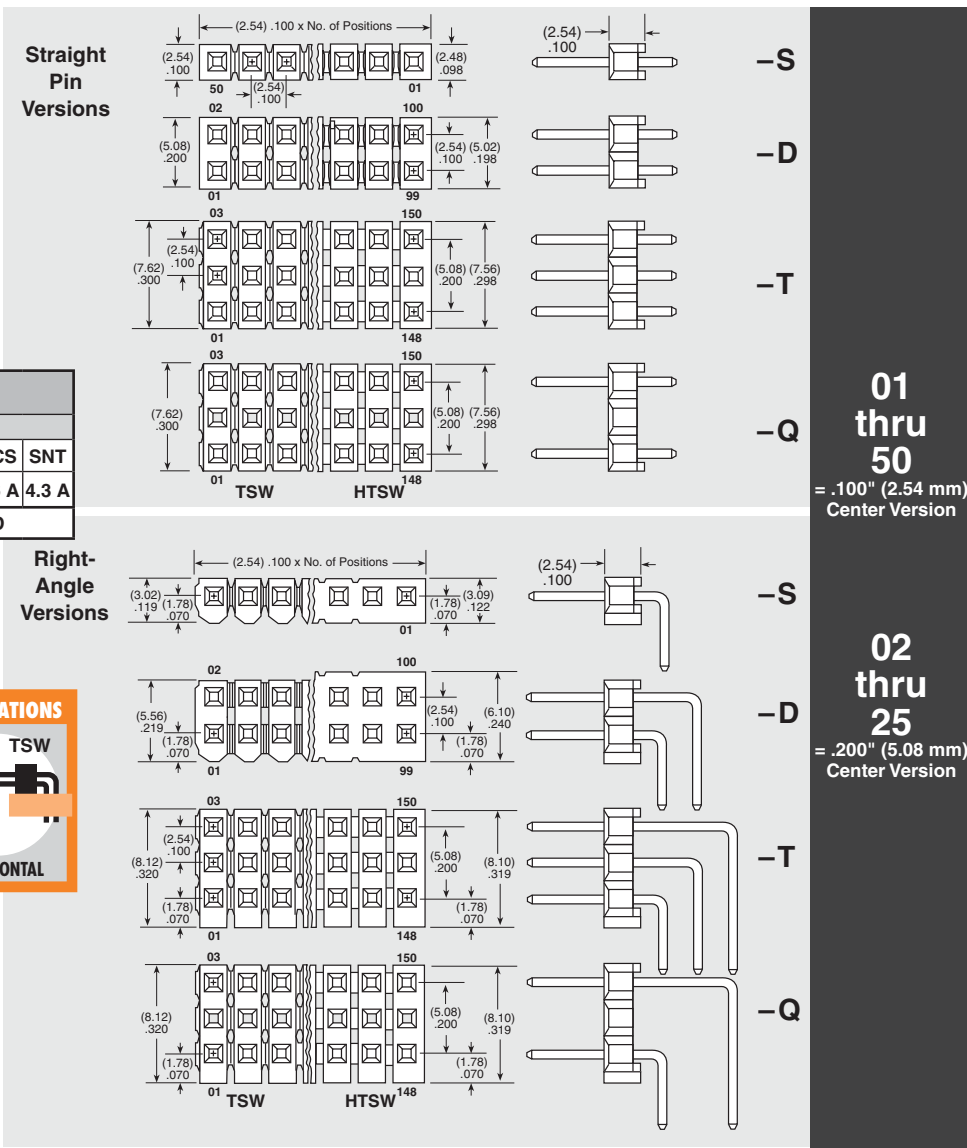
For complete scope of recognitions see [www.samtec.com/quality](http://www.samtec.com/quality)



**ALSO AVAILABLE (MOQ Required)**

- Other platings

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



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

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TSW-109-10-F-D-RA



TSW-112-07-G-T



HTSW-120-13-T-D



TSW-114-16-G-S-RE

**TSW, HTSW SERIES**

**LEAD STYLE**

**PLATING OPTION**

**ROW OPTION**

**OTHER OPTIONS**

**-F**

= Gold flash on post, Matte Tin on tail

**-L**

= 10 μ" (0.25 μm) Gold on post, Matte Tin on tail

**-G**

= 10 μ" (0.25 μm) Gold on post, Gold flash on balance

**-T**

= Matte Tin

**-S**

= Single Row

**-D**

= Double Row

**-T**

= Triple Row

**-Q**

= Double Row (5.08 mm) .200" row space

**-RA or -RE**

= Right-angle

**-NA**

= Right-angle (using straight body for coplanar mating with SSW-RA series)



(1.27) .050

**-LL**

= Locking Lead



Two leads per strip crimped in opposite directions on or near centerline. See charts for available styles. N/A with single row 1 or 2 positions. Recommended hole size (1.02 mm ± 0.03 mm) .040" ± .001"

**-LC**

= Locking Clip (Styles -08 thru -13 & -22 only)



Requires 4 pin minimum (NA with -T, -Q, -RA or -RE)

**-LA**

= -RA Option with -LL Option

**-"XXX"**

= Polarized Position

**OTHER SOLUTIONS**

- Elevated Right-angle option
- Shunts

**Straight Pin Versions**

(Specify "LEAD STYLE" from chart)

| STYLE | A               | B                 | C               |
|-------|-----------------|-------------------|-----------------|
| * -05 | (3.30)<br>.130  | (8.51)<br>.335    | (2.67)<br>.105  |
| * -06 | (2.41)<br>.095  | (7.62)<br>.300    | (2.67)<br>.105  |
| * -07 | (2.54)<br>.100  | (10.92)<br>.430   |                 |
| * -08 | (5.08)<br>.200  | (13.46)<br>.530   |                 |
| -09   | (10.16)<br>.400 | (18.54)<br>.730   | (5.84)<br>.230  |
| -10   | (12.70)<br>.500 | (21.08)<br>.830   |                 |
| -11   | (15.24)<br>.600 | (23.62)<br>.930   |                 |
| -12   | (17.78)<br>.700 | (26.16)<br>.1.030 |                 |
| -13   | (22.86)<br>.900 | (31.24)<br>.1.230 |                 |
| -14   | (2.79)<br>.110  | (13.46)<br>.530   | (8.13)<br>.320  |
| * -15 |                 | (18.54)<br>.730   | (13.21)<br>.520 |
| * -16 | (7.87)<br>.310  |                   | (8.13)<br>.320  |
| * -17 | (2.79)<br>.110  | (21.08)<br>.830   | (15.74)<br>.620 |

\* Available with -LL (Locking Lead) Option



Specify -07 for best mate with IDXX Series IDC Cable

| STYLE | A                 | B                 | C                 |
|-------|-------------------|-------------------|-------------------|
| * -18 |                   | (23.62)<br>.930   | (18.29)<br>.720   |
| * -19 | (2.79)<br>.110    | (26.16)<br>.1.030 | (20.83)<br>.820   |
| * -20 |                   | (31.24)<br>.1.230 | (25.91)<br>.1.020 |
| * -21 |                   | (36.32)<br>.1.430 | (30.99)<br>.1.220 |
| * -22 | (7.62)<br>.300    | (16.00)<br>.630   | (5.84)<br>.230    |
| * -23 | (2.92)<br>.115    | (11.30)<br>.445   | (6.73)<br>.265    |
| * -24 |                   | (12.15)<br>.490   | (6.73)<br>.265    |
| * -25 | (5.33)<br>.210    | (16.00)<br>.630   | (8.13)<br>.320    |
| ▲ -26 | (3.20)<br>.126    | (11.58)<br>.456   |                   |
| -27   | (25.40)<br>.1.000 | (33.78)<br>.1.330 | (5.84)<br>.230    |
| -28   | (20.32)<br>.800   | (28.70)<br>.1.130 |                   |
| -29   | (23.11)<br>.910   | (33.78)<br>.1.330 | (8.13)<br>.320    |
| -30   | (18.03)<br>.710   | (28.70)<br>.1.130 |                   |
| + -41 | (0.89)<br>.035    | (9.27)<br>.365    | (5.84)<br>.230    |
| + -42 | (1.27)<br>.050    | (11.94)<br>.470   | (8.13)<br>.320    |

+ Style -41 & -42 available with HTSW only.

▲ Except: Style -26 (0.46) .018 DIA Tail

**Right-Angle Versions**

(Specify "LEAD STYLE" from chart and select -RA or -RE from other options)

| -RA LEAD STYLE | SINGLE (-S)     |                | DOUBLE (-D)     | TRIPLE (-T & -Q) |
|----------------|-----------------|----------------|-----------------|------------------|
|                | A               | C              | A               | A                |
| -08            | (2.29)<br>.090  |                | (2.29)<br>.090  | (2.29)<br>.090   |
| -09            | (7.37)<br>.290  |                | (7.37)<br>.290  | (7.37)<br>.290   |
| -10            | (9.91)<br>.390  | (5.84)<br>.230 | (9.91)<br>.390  | (9.91)<br>.390   |
| -11            | (12.45)<br>.490 |                | (12.45)<br>.490 | (12.45)<br>.490  |
| -12            | (14.99)<br>.590 |                | (14.99)<br>.590 | (14.99)<br>.590  |
| -13            | (20.07)<br>.790 |                | (20.07)<br>.790 | N/A              |
| * -16          | (5.08)<br>.200  | (8.13)<br>.320 | (5.08)<br>.200  | (5.08)<br>.200   |
| -21            | (25.15)<br>.990 | (5.84)<br>.230 | N/A             | N/A              |
| * -22          | (4.83)<br>.190  |                | (4.83)<br>.190  | (4.83)<br>.190   |
| * -25          | (2.54)<br>.100  | (8.13)<br>.320 | (2.54)<br>.100  | (2.54)<br>.100   |
| -27            | (22.61)<br>.890 | (5.84)<br>.230 | N/A             |                  |
| -28            | (17.53)<br>.690 |                | (17.53)<br>.690 |                  |
| -29            | (20.32)<br>.800 | (8.13)<br>.320 | N/A             | N/A              |
| -30            | (15.24)<br>.600 |                | (15.24)<br>.600 |                  |

| -RE LEAD STYLE | SINGLE A        | C              |
|----------------|-----------------|----------------|
| -09            | (4.83)<br>.190  |                |
| -10            | (7.37)<br>.290  |                |
| -11            | (9.91)<br>.390  | (5.84)<br>.230 |
| -12            | (12.45)<br>.490 |                |
| -13            | (17.53)<br>.690 |                |
| -16            | (2.54)<br>.100  | (8.13)<br>.320 |
| -21            | (22.61)<br>.890 |                |
| -22            | (2.29)<br>.090  | (5.84)<br>.230 |
| -27            | (20.07)<br>.790 |                |
| -28            | (14.99)<br>.590 |                |

\* Available with -LA (Locking Lead) Option



| LEAD STYLE | B              |
|------------|----------------|
| -RA        | (1.52)<br>.060 |
| -RE        | (4.06)<br>.160 |

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