



**THE DATASHEET OF  
TSW-103-07-T-S**



# THROUGH-HOLE .025" SQ POST HEADER



(2.54 mm) .100" PITCH • TSW/HTSW SERIES

## TSW/HTSW

### Board Mates:

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

### Cable Mates:

IDSD, IDSS

## SPECIFICATIONS

### Insulator Material:

TSW: PBT

HTSW: Natural LCP

### 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;

515 VAC mated with ESQ;

450 VAC -RA/-RE mated

with BCS or SSM;

400 VAC mated with CES

### Lead-Free Solderable:

HTSW: Yes

TSW: No, Lead Wave Only

## 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

## SERIES

### TSW

= Standard Strip

### HTSW

= Hi-Temp Strip

## PIN CENTERS

### -1

= .100" (2.54 mm) Centers,  
(All positions filled)

### -2

= .200" (5.08 mm) Centers,  
(Every other position filled)

## NO. PINS PER ROW

### 01 thru 50

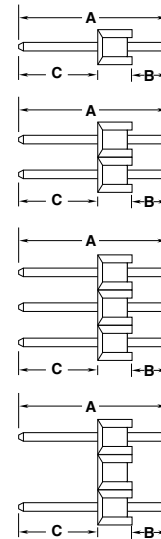
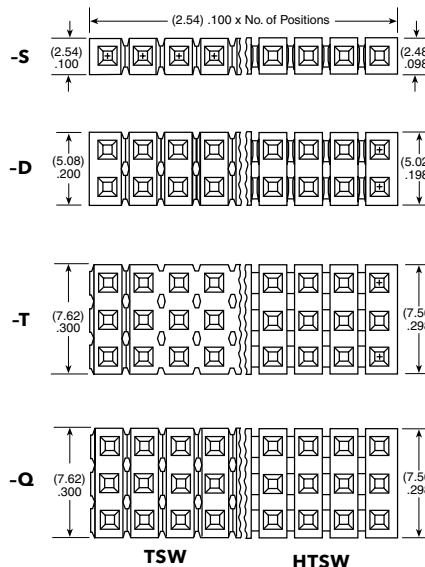
= .100" (2.54 mm)  
Center Version

### 02 thru 25

= .200" (5.08 mm)  
Center Version

## LEAD STYLE

Specify  
LEAD STYLE  
from chart



Straight Pin Versions

## ALSO AVAILABLE

MOQ Required

Other Platings

## OTHER SOLUTIONS

Elevated Right-angle option  
Shunts

## STRAIGHT PIN VERSIONS

| LEAD STYLE | A             | B            | C            |
|------------|---------------|--------------|--------------|
| *-05       | (8.51) .335   | (3.30) .130  | (2.67) .105  |
| *-06       | (7.62) .300   | (2.41) .095  | (2.67) .105  |
| *-07       | (10.92) .430  | (2.54) .100  |              |
| *-08       | (13.46) .530  | (5.08) .200  |              |
| -09        | (18.54) .730  | (10.16) .400 |              |
| -10        | (21.08) .830  | (12.70) .500 | (5.84) .230  |
| -11        | (23.62) .930  | (15.24) .600 |              |
| -12        | (26.16) 1.030 | (17.78) .700 |              |
| -13        | (31.24) 1.230 | (22.86) .900 |              |
| -14        | (13.46) .530  | (2.79) .110  | (8.13) .320  |
| *-15       | (18.54) .730  | (7.87) .310  | (13.21) .520 |
| *-16       |               | (8.13) .320  | (8.13) .320  |
| *-17       | (21.08) .830  | (2.79) .110  | (15.74) .620 |
| *-18       | (23.62) .930  |              | (18.29) .720 |

\* Available with -LL (Locking Lead) Option  
Specify -07 for best mate with IDXX Series IDC Cable

## STRAIGHT PIN VERSIONS

| LEAD STYLE | A             | B             | C             |
|------------|---------------|---------------|---------------|
| *-19       | (26.16) 1.030 | (2.79) .110   | (20.83) .820  |
| *-20       | (31.24) 1.230 |               | (25.91) 1.020 |
| *-21       | (36.32) 1.430 | (2.79) .110   | (30.99) 1.220 |
| *-22       | (16.00) .630  | (7.62) .300   | (5.84) .230   |
| *-23       | (11.30) .445  | (2.92) .115   | (6.73) .265   |
| *-24       | (12.15) .480  |               | (8.13) .320   |
| *-25       | (16.00) .630  | (5.33) .210   | (8.13) .320   |
| ▲-26       | (11.58) .456  | (3.20) .126   |               |
| -27        | (33.78) 1.330 | (25.40) 1.000 | (5.84) .230   |
| -28        | (28.70) 1.130 | (20.32) .800  |               |
| -29        | (33.78) 1.330 | (23.11) .910  | (8.13) .320   |
| -30        | (28.70) 1.130 | (18.03) .710  |               |
| +41        | (9.27) .365   | (0.89) .035   | (5.84) .230   |
| +42        | (11.94) .470  | (1.27) .050   | (8.13) .320   |

† Style -41 & -42 available with HTSW only.  
▲ Except: Style -26 (0.46) .018 DIA Tail



### PLATING OPTION

- 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

### ROW OPTION

- S**  
= Single Row
- D**  
= Double Row
- T**  
= Triple Row
- Q**  
= Double Row  
(5.08 mm).200" row space

### OTHER OPTION

- RA or -RE**  
= Right-angle
- NA**  
= Right-angle  
(Using straight body for coplanar mating with SSW-RA series)
- LL**  
= Locking Lead  
See charts for available styles.  
Not available 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)  
(Not available with T, -Q, -RA or -RE)
- LA**  
= -RA Option with -LL Option
- "XXX"**  
= Polarized Position



### Right-Angle Versions

| LEAD STYLE | D           |
|------------|-------------|
| -RA        | (1.52) .060 |
| -RE        | (4.06) .160 |



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

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

\* Available with -LA (Locking Lead) Option

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View TSW-103-07-T-S on WIN SOURCE](#)
-  [Samtec Inc. Information](#)

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