

(2,54 mm) .100"

ESW, ESQ SERIES

# ELEVATED SOCKET

**Mates with:**  
TSW, MTSW, EW,  
MTLW, TSS, ZSS, TSM,  
DW, ZW, HW, TSSH, HTSS

## SPECIFICATIONS

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

**Insulator Material:**  
Black Glass Filled  
Polyester

**Contact Material:**  
Phosphor Bronze

**Plating:**  
Au or Sn over  
50µ" (1,27 µm) Ni

**Voltage Rating:**  
550 VAC mated with  
TSW or ESQ

**Operating Temp Range:**  
-55°C to +125°C with Gold  
-55°C to +105°C with Tin

**Contact Resistance:**  
10 mΩ

**Insertion Depth:**  
(3,68 mm) .145" to  
(6,35 mm) .250"

**Insertion Force:**  
(Single contact only)  
Standard = 6 oz (1,67 N) avg.  
(0,64 mm) .025" SQ pin);

ESW Low Insertion Force=

3 oz (0,83 N) avg.

ESQ Low Insertion Force=

3.3 oz (0,92 N) avg.

**Normal Force:**

Standard = 125 grams (4,4 N)

**Withdrawal Force:**

(Single contact only)

Standard = 5 oz (1,39 N) avg.

(0,64 mm) .025" SQ pin);

ESW Low Insertion Force=

2.6 oz (0,72 N) avg.

ESQ Low Insertion Force=

2.9 oz (0,81 N) avg.

**Max Cycles:**

100 with 10µ" (0,25 µm) Au

**RoHS Compliant:**

Yes

**Lead-Free Solderable:**

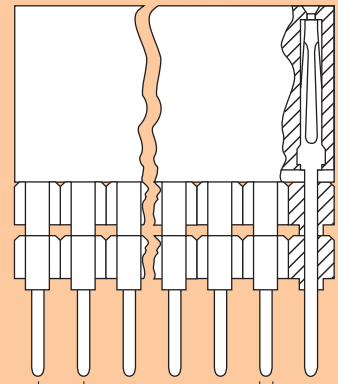
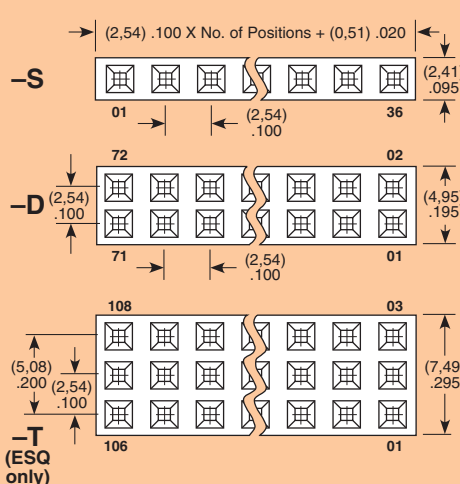
Wave only



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

TYPE STRIP	1	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	ROW OPTION	OTHER OPTION										
<b>ESW</b> = Solder Tail	<b>CURRENT RATING (PER CONTACT)</b> <table border="1"> <thead> <tr> <th>AMBIENT TEMP</th> <th>ESW mated with TSW</th> </tr> </thead> <tbody> <tr> <td>20°C</td> <td>6.9A</td> </tr> <tr> <td>40°C</td> <td>6.0A</td> </tr> <tr> <td>60°C</td> <td>5.3A</td> </tr> <tr> <td>95°C</td> <td>3.5A</td> </tr> </tbody> </table>	AMBIENT TEMP	ESW mated with TSW	20°C	6.9A	40°C	6.0A	60°C	5.3A	95°C	3.5A	<b>ESQ</b> = Square Tail	<b>6 POSITIONS (2x3) POWERED</b>	<b>-L</b> = 10µ" (0,25 µm) Gold contact, Matte Tin on tail	<b>-S</b> = Single Row	<b>-LL</b> = Locking Lead
AMBIENT TEMP		ESW mated with TSW														
20°C		6.9A														
40°C		6.0A														
60°C	5.3A															
95°C	3.5A															
<b>-G</b> = 20µ" (0,51 µm) Gold contact, Gold Flash on Balance	<b>-D</b> = Double Row	 Two leads per strip crimped. N/A with single row 1 or 2 positions.														
<b>-T</b> = Matte Tin (N/A w/LIF contact)	<b>-T</b> = Triple Row (ESQ only)															
<b>Note:</b> Other Gold plating options available. Contact Samtec.			<b>"XXX"</b> = Polarized													

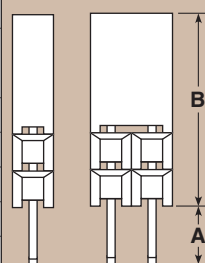
01 thru 36



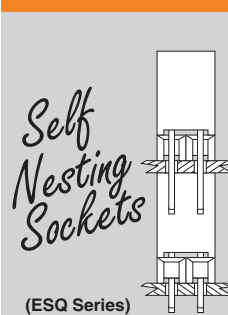
ESW (0,41) x (0,79) .016  
ESQ (0,64) .025 SQ

## Specify LEAD STYLE from chart below.

STANDARD INSERTION FORCE	LOW INSERTION FORCE	A	B
- 12	- 37	(2,29) .090	(11,05) .435
- 13	- 38	(7,36) .290	
- 23	- 48	(4,83) .190	(13,59) .535
- 33	- 58	(2,29) .090	(16,13) .635
- 14	- 39	(12,19) .480	(11,05) .435
- 24	- 49	(9,65) .380	(13,59) .535
- 34	- 59	(7,11) .280	(16,13) .635
- 44	- 69	(4,57) .180	(18,67) .735



## APPLICATIONS



(ESQ Series)

PC/104™ J1/P1 "Stackthrough" Connectors	
Standard Insertion Force	ESQ-132-14-G-D
Low Insertion Force	ESQ-132-39-G-D
PC/104™ J1 "Non-Stackthrough" Connectors	
Standard Insertion Force	ESQ-132-12-G-D
Low Insertion Force	ESQ-132-37-G-D
PC/104™ J2/P2 "Stackthrough" Connectors	
Standard Insertion Force	ESQ-120-14-G-D
Low Insertion Force	ESQ-120-39-G-D

PC/104 is a trademark of the PC/104 Consortium.

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

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