

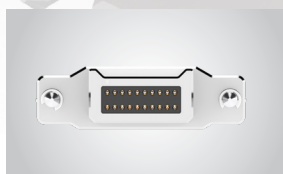
# ULTRA RUGGED I/O SYSTEMS

(1.00 mm) .0394" PITCH



## FEATURES & BENEFITS

- Small form factor
- Four points of contact for a reliable connection and high mating cycles
- Up to 40 positions per row
- Cable-to-cable & cable-to-board solutions
- EMI shielding limits signal degradation and optimizes performance
- Through-hole or surface mount
- 28 & 30 AWG cable



Shown actual size  
at 20 total positions



Hyperboloid-type contact for  
extreme high mating cycles



Extreme density with up to 1,450 total I/Os in a 1RU panel  
(29 cables at 50 total I/Os each)

## KEY SPECIFICATIONS (P1PD(X), B1SD(X) & P1M)

PITCH	INSULATOR MATERIAL	CONTACT MATERIAL	SHIELD MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING
1.00 mm	Liquid Crystal Polymer	Beryllium Copper	Zinc Alloy	Au over 50 μ" (1.27 μm) Ni	-10 °C to +80 °C (PVC) -40 °C to +125 °C (*Teflon™ Fluoropolymer)	3.8 A per pin (2 pins powered)	200 VAC/ 282 VDC

\*Teflon™ is a trademark of The Chemours Company FC, LLC used under license by Samtec.

**(1.00 mm) .0394" PITCH • NON-PANEL MOUNT I/O CABLE/COMPONENTS**

SERIES	NO. OF POSITIONS	WIRE GAUGE	COLOR CODE	PLATING	ASSEMBLED LENGTH	EMI SHIELD	PINOUT
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**B1SD**  
= Double Row  
Non-Panel Mount  
PVC Cable

**B1SDT**  
= Double Row  
Non-Panel Mount  
Blue \*Teflon™  
Fluoropolymer Cable

**-10, -15,  
-25, -30**  
(Per Row)

**-28**  
= 28 AWG

**-30**  
= 30 AWG

(Leave blank for standard wire)

**C**  
= Color Code Wire  
(Not available with B1SDT)

**-H**  
= 30 μ" (0.76 μm)  
Gold on  
contact area,  
Gold flash  
on tail

**-"XX.X"**  
= Length in  
inches  
06.0"  
(152.4 mm)  
minimum

(Leave blank for  
non-EMI shield)

**-E**  
= EMI Shield  
(Not available  
with single ended)

(Leave  
blank for  
single  
ended)

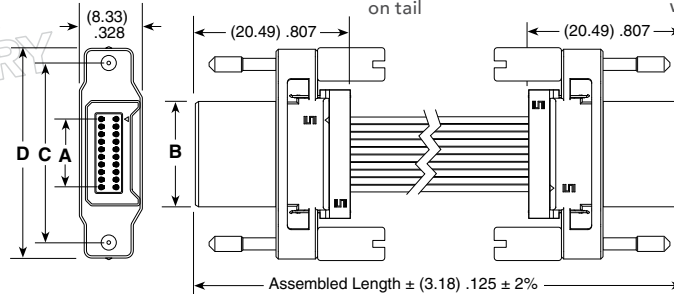
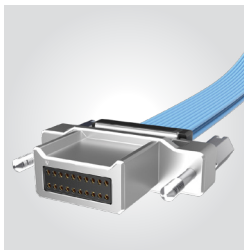
**1**  
= Pin 1 to  
Pin 1

**2**  
= Pin 1 to  
Pin 2

**3**  
= Pin 1 to  
Pin N

**4**  
= Pin 1 to  
Pin N-1

**B1SD, B1SDT**  
Cable Mates:  
**P1PD, P1PDT**  
Board Mates:  
**P1M**



**B1SDX-10-XXX-H-XX.X-3 SHOWN**

NO. OF POSITIONS	A	B	C	D
-10	(9.00) .354	(13.94) .549	(23.75) .935	(27.75) 1.093
-15	(14.00) .551	(18.94) .746	(28.75) 1.132	(32.75) 1.289
-25	(24.00) .945	(28.94) 1.139	(38.75) 1.526	(42.75) 1.683
-30	(29.00) 1.142	(33.94) 1.336	(43.75) 1.722	(47.75) 1.880

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**Notes:**  
Teflon™ Fluoropolymer Cable is intended for crimp only. Contact Samtec for solderable cable applications.

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

**B1SD & B1SDT CABLE HOLDER  
(Required for use with IBT1)**

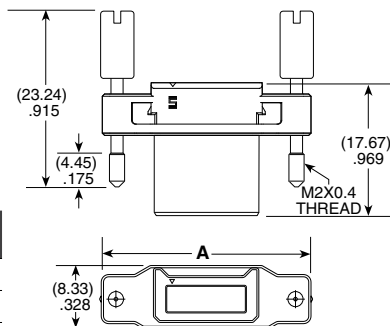
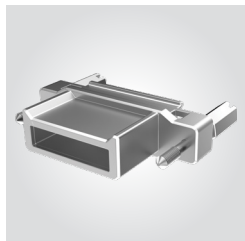
SERIES	NUMBER OF POSITIONS
B1SDR	-10, -15, -25, -30

View complete specifications at: [samtec.com?B1SD](http://samtec.com?B1SD) & [samtec.com?B1SDT](http://samtec.com?B1SDT)

B1SDS	NO. OF POSITIONS	N	OPTION
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**-10, -15, -25, -30**

**-CS**  
= Captive  
Screw



NO. OF POSITIONS	A
-10	(27.75) 1.093
-15	(32.75) 1.289
-25	(42.75) 1.683
-30	(47.75) 1.880

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

**TOOLING**

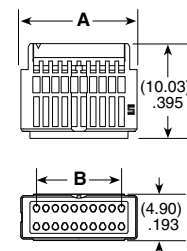
Hand Tool:  
CAT-HT-508-2830-12

Mini Applicator:  
CAT-MC-508-2830-XX-03

For more tooling information, visit [samtec.com/tooling](http://samtec.com/tooling)

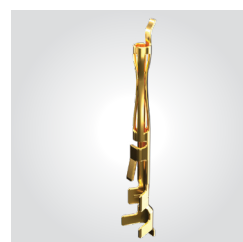
IBT1	NO. OF POSITIONS	1
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**-10, -15, -25, -30**



NO. OF POSITIONS	A	B
-10	(12.290) .484	(9.00) .354
-15	(17.290) .681	(14.00) .551
-25	(27.290) 1.074	(24.00) .945
-30	(32.290) 1.271	(29.00) 1.142

CC508	01	PLATING	PACKAGING
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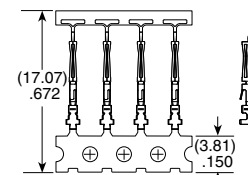


**-H**  
= 30 μ" (0.76 μm)  
Gold on contact area,  
Gold flash on tail

**-R**  
= Full Reel  
(25,000 Contacts  
Per Reel)

**-M**  
= Mini Reel  
(1,000 to 5,000  
Contacts Per Reel)

**-B**  
= Bubble Bag  
(35 Contacts)



View complete specifications at: [samtec.com?B1SDS](http://samtec.com?B1SDS), [samtec.com?IBT1](http://samtec.com?IBT1) & [samtec.com?CC508](http://samtec.com?CC508)

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