

# ULTRA RUGGED I/O SYSTEMS

(1.00 mm) .0394" PITCH



MAX  
**3.8**  
A m p s

## FEATURES & BENEFITS

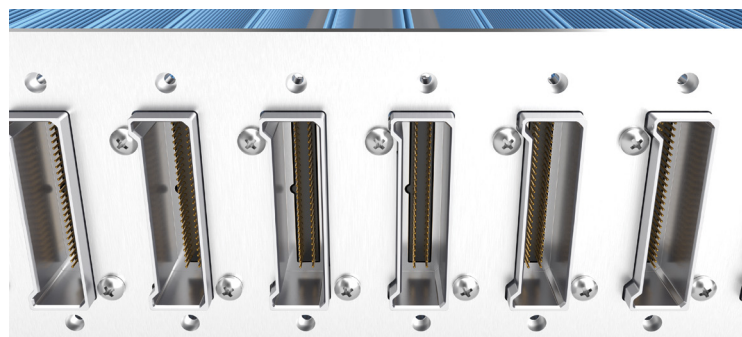
- Small form factor
- Four points of contact for a reliable connection and high mating cycles
- Up to 40 positions per row
- Cable-to-cable & cable-to-board solutions
- EMI shielding limits signal degradation and optimizes performance
- Through-hole or surface mount
- 28 & 30 AWG cable



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)	253 VAC

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

**(1.00 mm) .0394" PITCH • I/O BOARD MOUNT**

P1M	NO. OF POSITIONS	LEAD STYLE	PLATING	D	RA	PIN LENGTH	"X"R
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**-10, -15, -25, -30**  
(Per Row)

**-01**  
= Surface Mount

**-02**  
= Through-hole  
(1.57 mm PCB)

**-03**  
= Through-hole  
(2.36 mm PCB)

**-S**  
= 30 μ" (0.76 μm)  
Gold on contact area,  
Matte Tin on tail

**-STL**  
= 30 μ" (0.76 μm)  
Gold on contact area,  
Tin/Lead on tail

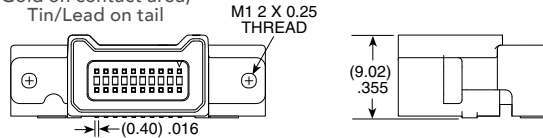
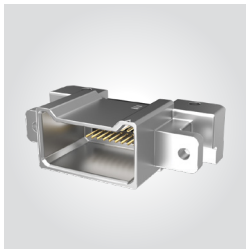
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**-H**  
= Hot Swap

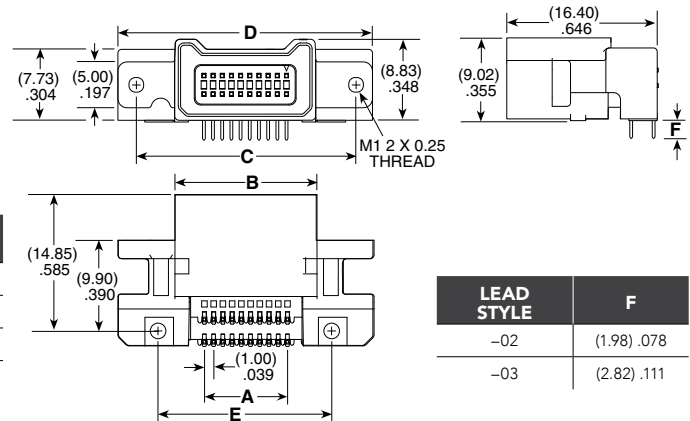
**-TR**  
= Tape & Reel

**-FR**  
= Full Reel  
Tape & Reel  
(must order max.  
quantity per reel;  
contact Samtec for  
quantity breaks)

**P1M**  
Cable Mates:  
B1SD, B1SDT



**P1M-10-01-S-D-RA SHOWN (SURFACE MOUNT)**



LEAD STYLE	F
-02	(1.98) .078
-03	(2.82) .111

NO. OF POSITIONS	A	B	C	D	E
-10	(9.00) .354	(15.39) .606	(23.75) .935	(27.75) 1.093	(18.80) .740
-15	(14.00) .551	(20.39) .803	(28.75) 1.132	(32.75) 1.289	(23.80) .937
-25	(24.00) .945	(30.39) 1.196	(38.75) 1.526	(42.75) 1.683	(33.80) 1.331
-30	(29.00) 1.142	(35.39) 1.393	(43.75) 1.722	(47.75) 1.880	(38.80) 1.528

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

View complete specifications at: [samtec.com?P1M](http://samtec.com?P1M)

P1M	NO. OF POSITIONS	LEAD STYLE	PLATING	DV	PIN LENGTH	PICK & PLACE OPTION	"X"R
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**-10, -15, -25, -30**  
(Per Row)

**-01**  
= Surface Mount

**-02**  
= Through-hole  
(1.57 mm PCB)

**-03**  
= Through-hole  
(2.36 mm PCB)

**-S**  
= 30 μ" (0.76 μm)  
Gold on contact area,  
Matte Tin on tail

**-STL**  
= 30 μ" (0.76 μm)  
Gold on contact area,  
Tin/Lead on tail

(Leave blank for standard)

**-H**  
= Hot Swap

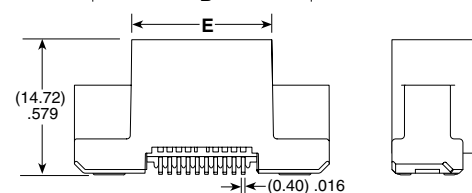
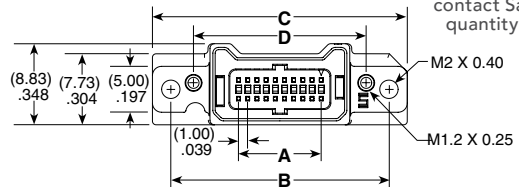
(Leave blank for no pad)

**-K**  
= (8.25 mm) .315"  
DIA Polyimide  
Film Pick &  
Place Pad

**-TR**  
= Tape & Reel

**-FR**  
= Full Reel  
Tape & Reel  
(must order max.  
quantity per reel;  
contact Samtec for  
quantity breaks)

**P1M**  
Cable Mates:  
B1SD, B1SDT



**P1M-10-01-S-DV SHOWN**

NO. OF POSITIONS	A	B	C	D	E
-10	(9.00) .354	(23.75) .935	(27.75) 1.093	(18.80) .740	(15.22) .599
-15	(14.00) .551	(28.75) 1.132	(32.75) 1.289	(23.80) .937	(20.22) .796
-25	(24.00) .945	(38.75) 1.526	(42.75) 1.683	(33.80) 1.331	(30.22) 1.190
-30	(29.00) 1.142	(43.75) 1.722	(47.75) 1.880	(38.80) 1.528	(35.22) 1.387

**Note:**  
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