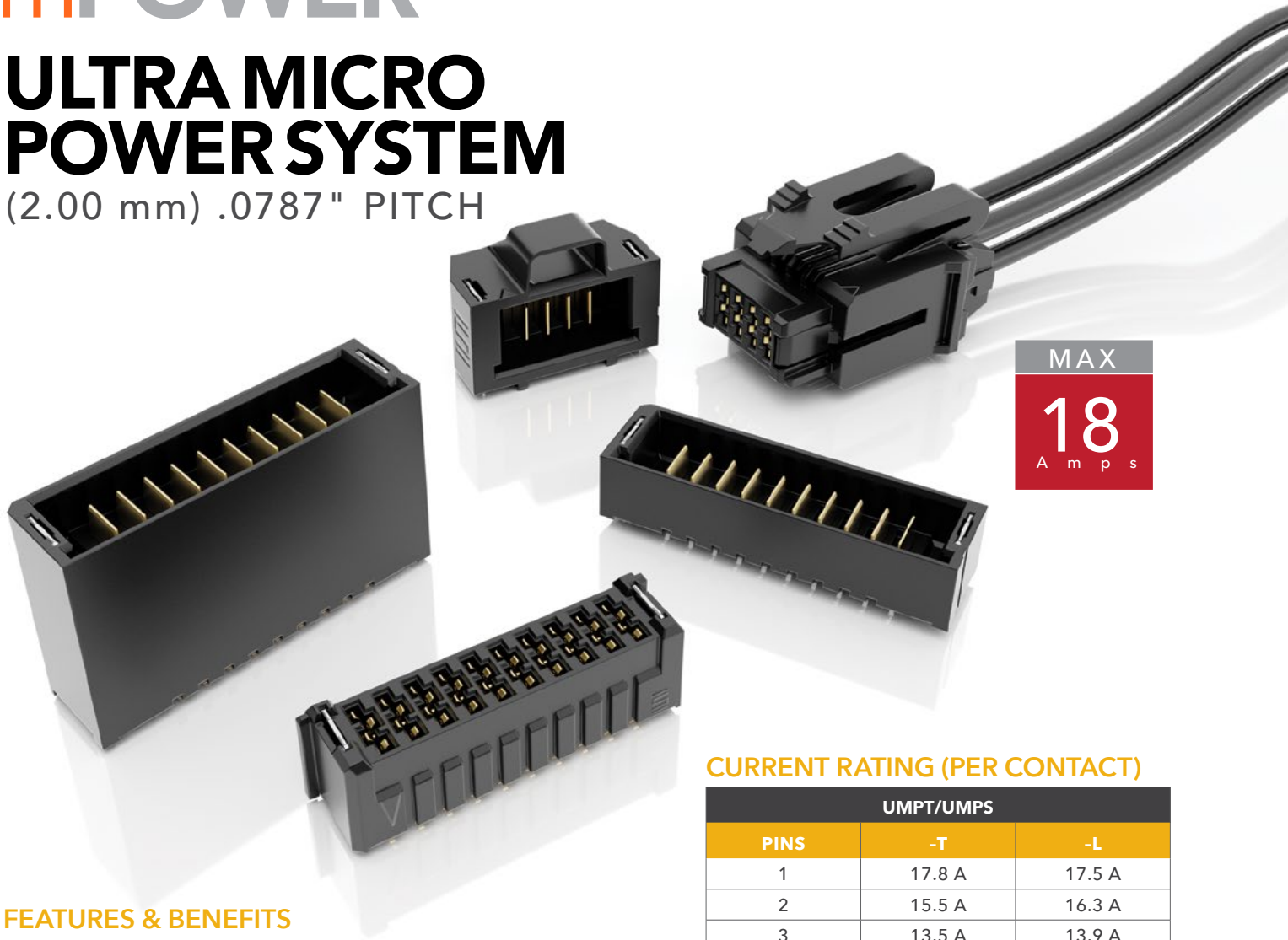


# mPOWER®

## ULTRA MICRO POWER SYSTEM

(2.00 mm) .0787" PITCH



MAX

**18**  
A m p s

### FEATURES & BENEFITS

- Board-to-board, cable-to-board and cable-to-cable
- Up to 18 A per blade (1 blade powered)
- Choice of 2 to 10 positions
- 5 mm to 20 mm stack heights; vertical and right-angle orientations
- Tin or 10 μ" Gold plated power blades; 30 μ" Gold plating available to meet specific regulations
- Optional weld tabs
- Mating cable assemblies with plastic top or metal side latching
- Severe Environment Testing qualified (UMPT/UMPS); aligns with MIL-DTL-55302. Visit [samtec.com/set](http://samtec.com/set)

### KEY SPECIFICATIONS (UMPT/UMPS)

STACK HEIGHTS	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	VOLTAGE RATING	LEAD-FREE SOLDERABLE
5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 20 mm	Black LCP	Copper Alloy	Sn or Au over 50 μ" (1.27 μm) Ni	-55 °C to +105 °C with Tin -55 °C to +125 °C with Gold	460 VAC/ 650 VDC	Yes

### CURRENT RATING (PER CONTACT)

PINS	UMPT/UMPS	
	-T	-L
1	17.8 A	17.5 A
2	15.5 A	16.3 A
3	13.5 A	13.9 A
4	12.9 A	13.2 A
10	9.8 A	8.9 A

Ratings are derated 20% with 30 °C rise to maximum allowable temperature.


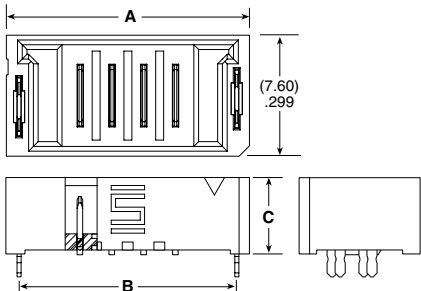
### CREEPAGE & CLEARANCE

UMPT/UMPS	
CREEPAGE	2.20 mm
CLEARANCE	1.65 mm

Selectively loading contacts achieves customer specific creepage and clearance requirements.

ULTRA MICRO POWER TERMINAL

UMPT	NO. OF POSITIONS	LEAD STYLE	PLATING OPTION	V	S	WELD TAB	LATCH OPTION	"X"R
<b>UMPT</b> Board Mates: <b>-03, -04, -05, -06, -07, -08, -09, -10</b> UMPS Cable Mates: <b>-09, -10</b> UMPC* (*UMPT requires -P or -M option for mating) Standoffs: GPSO	<b>-02, -03, -04, -05, -06, -07, -08, -09, -10</b>	<b>-01.5</b> = (01.5 mm) .059" <b>-02.5</b> = (02.5 mm) .098" <b>-06.5</b> = (06.5 mm) .256" <b>-07.5</b> = (07.5 mm) .295" <b>-12.5</b> = (12.5 mm) .492" (-W option required)	<b>-L</b> = 10 μ" (0.25 μm) Gold on contact, Matte Tin on tail <b>-S</b> = 30 μ" (0.76 μm) Gold on contact, Matte Tin on tail <b>-T</b> = Matte Tin			(Leave blank for no weld tab) <b>-W</b> = Weld Tab Through-hole (Required for -12.5 lead style)	(Leave blank for no latch) (Only available on -02.5 lead style) (Weld tab required) <b>-P</b> = Plastic top latch <b>-M</b> = Metal side latches	<b>-TR</b> = Tape & Reel <b>-FR</b> = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)

LEAD STYLE	C	NO. OF POSITIONS	
		A (-P & No latch)	B (-M latch)
-01.5	(4.80) .189	(11.30) .445	(9.70) .382
-02.5	(5.80) .228	(13.30) .524	(11.70) .460
-06.5	(9.55) .376	(15.30) .603	(13.70) .539
-07.5	(10.80) .425	(17.30) .681	(15.70) .618
-12.5	(15.80) .622	(19.30) .760	(17.70) .697
		(21.30) .839	(19.70) .776
		(23.30) .917	(21.70) .854
		(25.30) .996	(23.70) .933
		(27.30) 1.075	(25.70) 1.012
		(29.30) 1.154	(27.60) 1.087

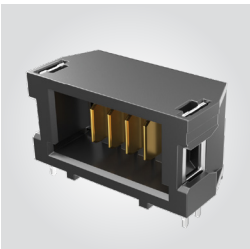
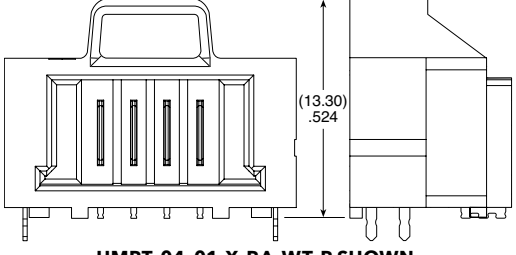
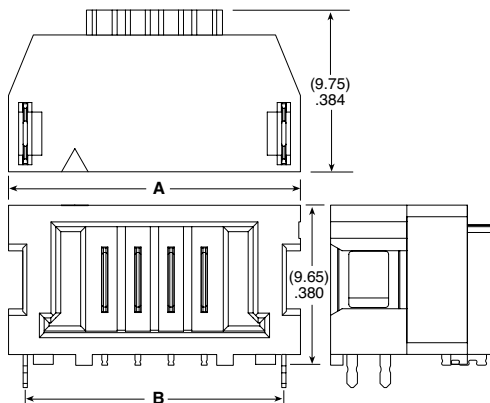
**UMPT-04-01.5-X-V-S-W SHOWN**

**Notes:**  
Severe Environment Testing qualified; aligns with MIL-DTL-55302. Visit [samtec.com/set](http://samtec.com/set)

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

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

UMPT	NO. OF POSITIONS	01	PLATING OPTION	RA	WELD TAB	LATCH OPTION	"X"R
<b>UMPT-RA</b> Board Mates: <b>UMPS</b> Cable Mates: <b>UMPC*</b> (*UMPT requires -P or -M option for mating)	<b>-02, -03, -04, -05, -06, -07, -08, -09, -10</b>		<b>-L</b> = 10 μ" (0.25 μm) Gold on contact, Matte Tin on tail <b>-S</b> = 30 μ" (0.76 μm) Gold on contact, Matte Tin on tail <b>-T</b> = Matte Tin		<b>-WT</b> = Weld Tab Through-hole	(Leave blank for no latch) <b>-P</b> = Plastic top latch <b>-M</b> = Metal side latches	<b>-TR</b> = Tape & Reel <b>-FR</b> = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks)

NO. OF POSITIONS	A		B	
	(-P & No latch)	(-M latch)	(-P & No latch)	(-M latch)
-02	(13.60) .535	(11.10) .437	(11.55) .455	
-03	(15.60) .614	(13.10) .516	(13.55) .533	
-04	(17.60) .693	(15.10) .594	(15.55) .612	
-05	(19.60) .772	(17.10) .673	(17.55) .691	
-06	(21.60) .850	(19.10) .752	(19.55) .770	
-07	(23.60) .929	(21.10) .831	(21.55) .848	
-08	(25.60) 1.008	(23.10) .909	(23.55) .927	
-09	(27.60) 1.087	(25.10) .988	(25.55) 1.006	
-10	(29.60) 1.165	(27.10) 1.067	(27.55) 1.085	

**UMPT-04-01-X-RA-WT-P SHOWN**  
**UMPT-04-01-X-RA-WT-M SHOWN**

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

View complete specifications at: [samtec.com?UMPT-RA](http://samtec.com?UMPT-RA)