# **mPOWER**<sup>®</sup>

ULTRA MICRO POWER SYSTEM

(2.00 mm) .0787" PITCH



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  $\mu$ " Gold plated power blades; 30  $\mu$ " 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

# CURRENT RATING (PER CONTACT)

UMPT/UMPS				
PINS	-7	-4.		
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  $^{\circ}\text{C}$  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.

#### **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

### **ULTRA MICRO POWER TERMINAL**



Cable Mates:

Standoffs:

(\*UMPT requires -P or

-M option for mating)

NO. OF POSITIONS

-02,

-03, -04,

-07, -08,

-09, -10

LEAD **STYLE** 

-01.5

= (01.5 mm).059"

-02.5

= (02.5 mm) .098"

-06.5

= (06.5 mm) .256"

- 07.5

**PLATING** OPTION

= 10 µ" (0.25 µm) Gold on contact,

Matte Tin on tail

**-S** = 30 μ"

(0.76 µm)

Gold on contact

Matte Tin on tail

WELD

LATCH OPTION (Leave blank (Leave blank

-W = Weld Tab Through-hole (Required for

–12.5 lead style)

for no weld tab)

for no latch) (Only available on -02.5 lead style) (Weld tab required)

-P = Plastic top latch

> -M = Metal side latches

-TR = Tape & Reel

Tape & Reel (must order max. quantity per reel; contact Samtec for quantity

**-FR** = Full Reel

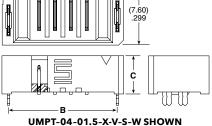
breaks)

Notes: Severe Environment Testing qualified; aligns with MIL-DTL-55302. Visit samtec.com/set

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



= (07.5 mm) .295" **- 12.5** = (12.5 mm) .492" (-W option required) = Matte Tin



(4.80) -015 .189 (5.80)-02.5 .228 (9.55)-06.5 .376 (10.80)-07.5 .425 (15.80) -12.5 .622

NO. OF	A	В	A	В	
POSITIONS	(-P & N	lo latch)	(-M latch)		
-02	(11.30) .445	(9.70) .382	(13.30) .524	(11.60) .457	
-03	(13.30) .524	(11.70) .460	(15.30) .602	(13.60) .535	
-04	(15.30) .603	(13.70) .539	(17.30) .681	(15.60) .614	
-05	(17.30) .681	(15.70) .618	(19.30) .760	(17.60) .693	
-06	(19.30) .760	(17.70) .697	(21.30) .839	(19.60) .772	
-07	(21.30) .839	(19.70) .776	(23.30) .917	(21.60) .850	
-08	(23.30) .917	(21.70) .854	(25.30) .996	(23.60) .929	
-09	(25.30) .996	(23.70) .933	(27.30) 1.075	(25.60) 1.008	
-10	(27.30) 1.075	(25.70) 1.012	(29.30) 1.154	(27.60) 1.087	

View complete specifications at: samtec.com?UMPT

# **UMPT**

NO. OF POSITIONS

-02, -03, -04,

-05, -06, -07,

-08, -09, -10

01

PLATING OPTION

= 10 µ" (0.25 µm) Gold on contact, Matte Tin on tail

= 30 μ" (0.76 μm) Gold on contact,

WELD TAB

-WT

= Weld Tab

Through-hole

LATCH OPTION

(Leave blank for no latch)

-P = Plastic top latch

-M= Metal side latches

-TR = Tape & Reel

"X"R

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

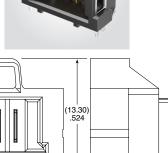
## **UMPT-RA Board Mates:**

Cable Mates:

(\*UMPT requires -P or -M option for mating)





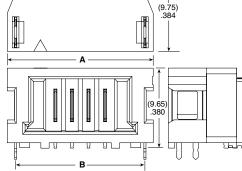


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UMPT-04-01-X-RA-WT-P SHOWN Note: Some lengths, styles and

options are non-standard, non-returnable.

Matte Tin on tail = Matte Tin (9.75) .384



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

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

View complete specifications at: samtec.com?UMPT-RA