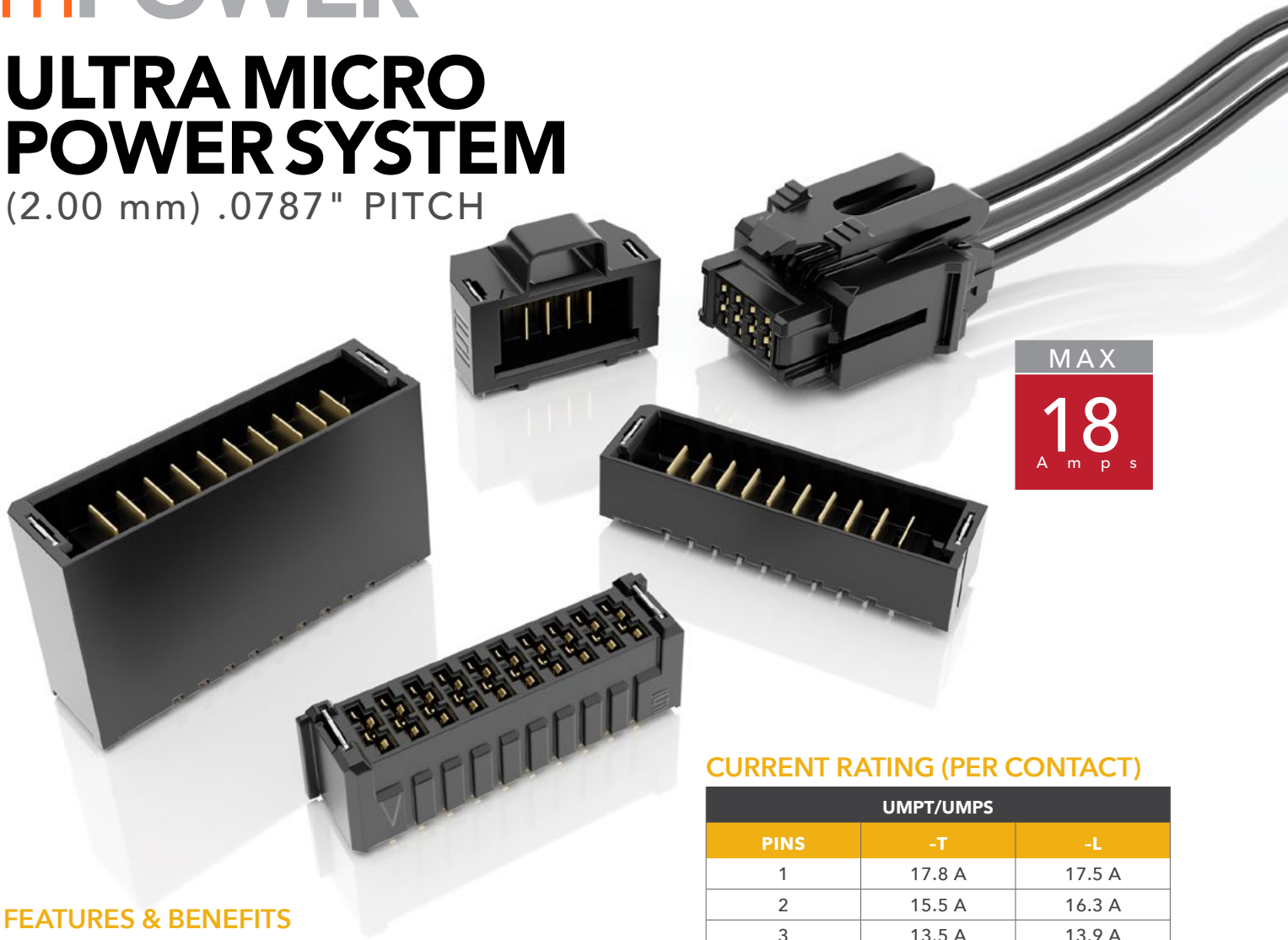


## ULTRA MICRO POWER SYSTEM

(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  $\mu$ " 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](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 $\mu$ " (1.27 $\mu$ m) 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

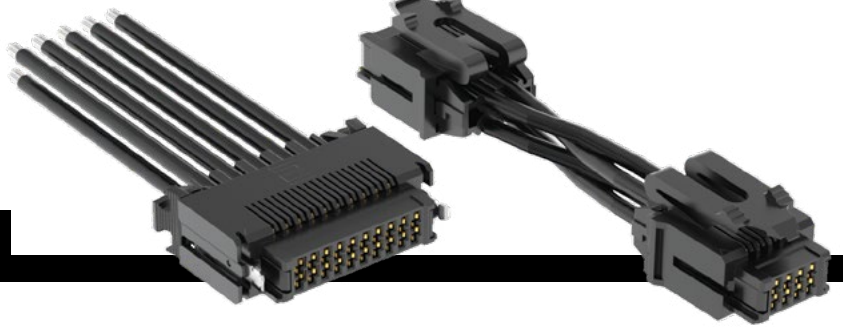
Ratings are derated 20% with 30 °C rise to maximum allowable temperature.

### 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 CABLE



SERIES	NO. OF POSITIONS	PLATING OPTION	WIRE GAUGE	LATCH OPTION	LENGTH	PINOUT
<b>UMPC</b> = Ultra Micro PVC Cable	<b>-02, -03, -04, -05, -06, -07, -08, -09, -10</b>	<b>-L</b> = 10 μ" (0.25 μm) Gold on contact, Tin on tail	<b>-16</b> = 16 AWG	(Latching required)	<b>-"XX.X"</b> = Assembled Length in Inches	(Leave blank for Single ended)
<b>UMPCT</b> = Ultra Micro Blue *Teflon™ Fluoropolymer Cable		<b>-S</b> = 30 μ" (0.76 μm) Gold on contact, Tin on tail	<b>-16C</b> = Color Coded Cable (UMPC only)	<b>-P</b> = Plastic top latch	PVC Cable Single ended = (76.2 mm) 03.0" min. Double ended = (101.6 mm) 04.0" min. (2-4 positions) Double ended = (127.0 mm) 05.0" min. (5-10 positions)	<b>-1</b> = Pin 01 to Pin 01
<b>UMPC(T)</b> Board Mates: UMPT (Plastic (-P) or metal (-M) latch required)		<b>-T</b> = Tin	<b>-18</b> = 18 AWG	<b>-M</b> = Metal side latches	Teflon™ Fluoropolymer Double ended = (228.6 mm) 09.0" min. (2-4 positions) Double ended = (254.0 mm) 10.0" min. (5-10 positions)	<b>-2</b> = Pin 01 to Pin N
			<b>-18C</b> = Color Coded Cable (UMPC only)			

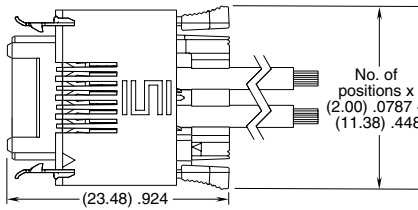
UMPC(T)  
PRELIMINARY

UMPC/UMPT (TIN PLATING)	
PINS	CURRENT RATING (PER CONTACT)
1	18.1 A
2	15.8 A
3	13.5 A
4	12.2 A
10	9.2 A

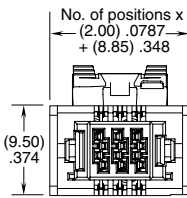
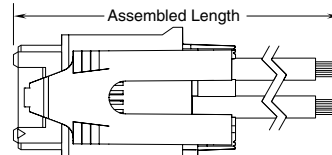
CABLE COLOR CODING	
PIN	COLOR
1	BROWN
2	RED
3	ORANGE
4	YELLOW
5	GREEN
6	BLUE
7	VIOLET
8	GRAY
9	WHITE
10	BLACK

### SPECIFICATIONS

**Insulator Material:** Black LCP  
**Contact Material:** Copper Alloy  
**Plating:** Sn or Au over 50 μ" (1.27 μm) Ni  
**Wire:** 16 or 18 AWG  
**Voltage Rating:** 435 VAC



UMPC-04-X-XX-M-XX.X SHOWN



UMPC-03-X-XX-P-XX.X SHOWN

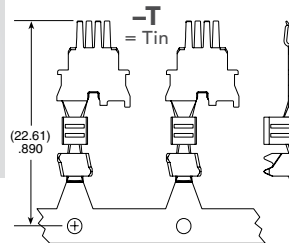
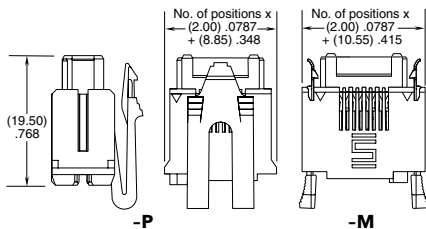
\*Teflon™ is a trademark of The Chemours Company FC, LLC used under license by Samtec.

**Note:** For wiring option information refer to drawings on web.

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

UMPC CABLE HOLDER (Required for use with IMPC)		
SERIES	NUMBER OF POSITIONS	LEAD STYLE
IMPC	-02, -03, -04, -05, -06, -07, -08, -09, -10	01 = 16 AWG
		02 = 18 AWG

IMPC	NO. OF POSITIONS	LATCH OPTION	CC489	01	PLATING	PACKAGING
	<b>-02, -03, -04, -05, -06, -07, -08, -09, -10</b>	<b>-P</b> = Plastic top latch			<b>-L</b> = 10 μ" (0.25 μm) Gold on contact, Tin on tail	<b>-R</b> = Full Reel (5,000 Contacts)
		<b>-M</b> = Metal side latches			<b>-S</b> = 30 μ" (0.76 μm) Gold on contact, Tin on tail	<b>-M</b> = Mini Reel (1,000 Contacts)
					<b>-T</b> = Tin	<b>-B</b> = Bubble Bag (35 Contacts)



### TOOLING

Hand Tool: CAT-HT-489-1618-13

Mini Applicator: CAT-MC-489-1618-XX-01

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

View complete specifications at: [samtec.com?IMPC](http://samtec.com?IMPC) & [samtec.com?CC489](http://samtec.com?CC489)