# **mPOWER**<sup>®</sup>

# ULTRA MICRO POWER SYSTEM

(2.00 mm) .0787" PITCH







## **UMPT/UMPS** compared to another small form factor power solution



### **FEATURES & BENEFITS**

- Up to 18 A per blade (1 blade powered)
- Design flexibility as a power-only system or a two-piece system for power/signal applications
- Use with Samtec's high-speed connector systems for a unique power/signal system
- Choice of 2 to 10 positions
- 5 mm to 20 mm stack heights available
- Tin or 10  $\mu$ " Gold plated power blades; 30  $\mu$ " Gold plating available to meet specific regulations
- Optional weld tabs
- Cable-to-board and cable-to-cable systems in development

### **CREEPAGE & CLEARANCE**

UMPT/UMPS			
CREEPAGE	2.20 mm		
CLEARANCE	1.65 mm		

Selectively loading contacts achieves customer specific creepage and clearance requirements.

### **KEY SPECIFICATIONS**

PITCH	STACK HEIGHTS	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	VOLTAGE RATING	LEAD-FREE SOLDERABLE
2.00 mm	5 to 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

## **mPOWER**°

## **ULTRA MICRO POWER CABLE**

## **SERIES**

NO. OF POSITIONS

PLATING OPTION

WIRE GAUGE

LATCH OPTION

(Latching

required)

-P

= Plastic

top latch

**LENGTH** 

-"XX.X"

= Assembled

**PINOUT** (Leave blank

for Single ended)

## **UMPC**

= Ultra Micro PVC Cable **UMPCT** 

= Ultra Micro Blue \*Teflon™

-02, -03, -04, -05, -06, -07, -08, -09, -10

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

= 30  $\mu$ " (0.76  $\mu$ m) Gold on contact,

Tin on tail

**-T** = Tin

-16C =Color Coded Cable (UMPC only)

-18

= 18 AWG

- 18C

= Color

Coded Cable

(UMPC only)

-16

= 16 AWG

-M = Metal side latches

Length in Inches 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.

-1 = Pin 01 to Pin 01

-2 = Pin 01 to Pin N

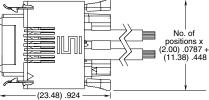
## Fluoropolymer Cable

#### UMPC(T) **Board Mates:**

(Plastic (-P) or metal (-M) latch required)

#### **SPECIFICATIONS**

Insulator Material: Contact Material: Copper Alloy Plating: Sn or Au over 50 µ" (1.27 µm) Ni Wire: 16 or 18 AWG Voltage Rating: 300V PVC



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

# No. of positions x (2.00) .0787 +

#### UMPC/UMPT (TIN PLATING) CURRENT RATING (PER CONTACT) PINS 16.8 A 14.6 A 3 12.6 A 4 11 6 A 10 8.8 A

Assembled Length

Teflon™ Fluoropolymer Double ended = (228.6 mm) 09.0" min. (2-4 positions) Double ended = (254.0 mm) 10.0" min. (5-10 positions)

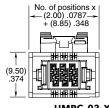
(5-10 positions)

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

CABLE

## **UMPC CABLE HOLDER** (Required for use with IMPC)

SERIES	NUMBER OF POSITIONS	LEAD STYLE
IMPCC	-02, -03, -04, -05, -06, -07, -08, -09, -10	01= 16 AWG
		02 = 18 AWG



(6.20) .244 UMPC-03-X-XX-P-XX.X SHOWN

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For wiring option information refer to drawings on web.

\*Teflon™ is a trademark of

**LATCH OPTION** 

View complete specifications at: samtec.com?UMPC & samtec.com?UMPCT

(23.50) .925

**PLATING** 

PACKAGING

## **IMPC**

NO. OF POSITIONS

-02, -03, -04, -05, -06, -07, -08, -09, -10

-P = Plastic top latch

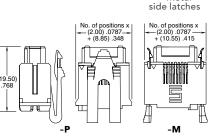
-M

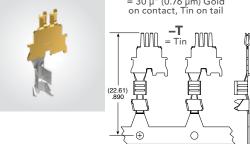
= Metal

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

-R Full Reel (5,000 Contacts)







-M= Mini Reel (1,000 Contacts)

= 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 & samtec.com?CC489