# **mPOWER**<sup>®</sup>

ULTRA MICRO POWER SYSTEM

(2.00 mm) .0787" PITCH



18 A m p s

> 17.5 A 16.3 A

> 13.9 A

13.2 A

8.9 A

### **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

# **CREEPAGE & CLEARANCE**

PINS 1

2

3

4

10

allowable temperature.

UMPT/UMPS				
CREEPAGE	2.20 mm			
CLEARANCE	1.65 mm			

CURRENT RATING (PER CONTACT)

UMPT/UMPS

17.8 A

15.5 A

13.5 A

12.9 A

9.8 A

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

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





**UMPS** 

NO. OF POSITIONS

-02, -03, -04,

-05, -06, -07, -08, -09, -10

**LEAD** STYLE

-03.5

= (03.5 mm) .138"

-05.5

= (05.5 mm) .217" -07.5 = (07.5 mm) .295"

PLATING OPTION

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

 $\begin{array}{c} \textbf{-S} \\ = 30~\mu''~(0.76~\mu\text{m}) \\ \text{Gold on contact,} \\ \text{Matte Tin on tail} \end{array}$ 

= Matte Tin







**OPTION** 

-W

"X"R

-TR = Tape & Reel

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

= Weld Tab Through-hole (Leave blank for no weld tab)

**UMPS Board Mates:** Standoffs:



|--|

NO. OF POSITIONS	A	В	С
-02	(9.05) .356	(7.65) .301	(6.00) .236
-03	(11.05) .435	(9.65) .380	(8.00) .315
-04	(13.05) .514	(11.65) .459	(10.00) .394
-05	(15.05) .593	(13.65) .537	(12.00) .472
-06	(17.05) .671	(15.65) .616	(14.00) .551
-07	(19.05) .750	(17.65) .695	(16.00) .630
-08	(21.05) .829	(19.65) .774	(18.00) .709
-09	(23.05) .907	(21.65) .852	(20.00) .787
-10	(25.05) .986	(23.65) .931	(22.00) .866

LEAD STYLE	D	
-03.5	(4.15) .163	
-05.5	(6.15) .242	
-07.5	(8.15) .321	

(6.20) .244 ← B →
UMPS-04-03.5-X-V-S-W SHOWN

**UMPT/UMPS** 

**CURRENT RATING (PER CONTACT)** 

-т	-L
17.8 A	17.5 A
15.5 A	16.3 A
13.5 A	13.9 A
12.9 A	13.2 A
9.8 A	8.9 A
	17.8 A 15.5 A 13.5 A 12.9 A

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

	MATED HEIGHT				
UMPT LEAD STYLE	UMPS LEAD STYLE				
	-03.5	-05.5	-07.5		
-01.5	(5.00) .197	(7.00) .276	(9.00) .354		
-02.5	(6.00) .236	(8.00) .315	(10.00) .394		
-06.5	(10.00) .394	(12.00) .472	(14.00) .551		
-07.5	(11.00) .433	(13.00) .512	(15.00) .591		
<b>–12.5</b>	(16.00) .630	(18.00) .709	(20.00) .787		

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

Some lengths, styles and otpons are non-standard, non-returnable

View complete specifications at: samtec.com?UMPS