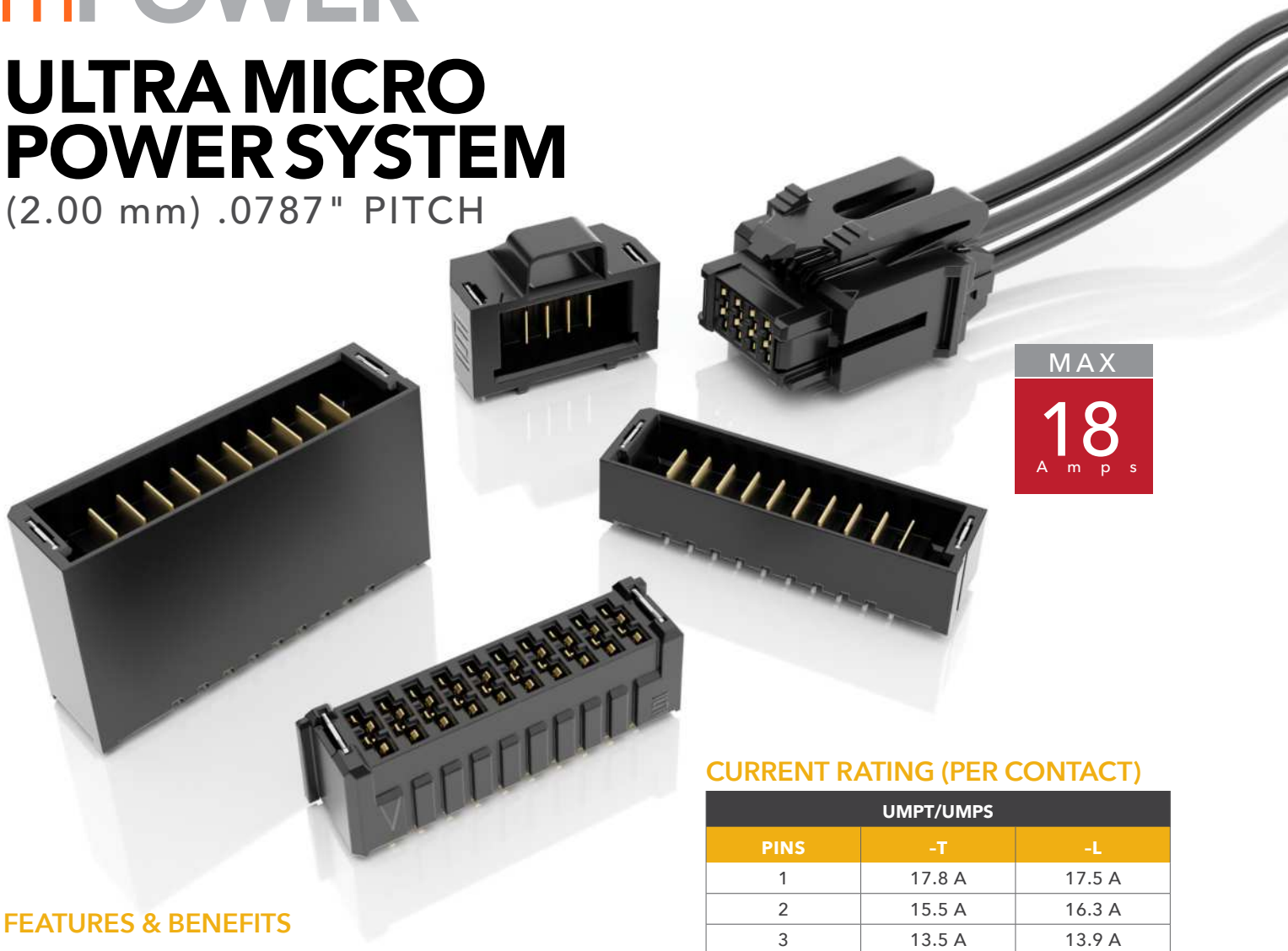
mPOWER®

# ULTRA MICRO POWER SYSTEM

(2.00 mm) .0787" PITCH



MAX 18 Amps

## 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

## CURRENT RATING (PER CONTACT)

| UMPT/UMPS | | |
|---|---|---|
| PINS | -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.

## 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<br>-55 °C to +125 °C with Gold | 460 VAC/ 651 VDC | Yes |



Unless otherwise approved in writing by Samtec, all parts and components are designed and built according to Samtec's specifications which are subject to change without notice.

MAX 18 Amps

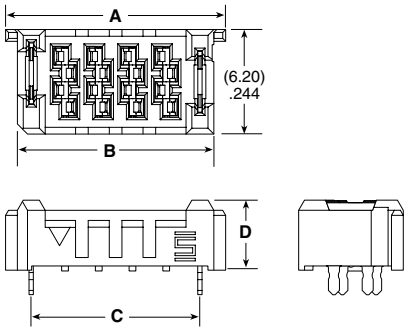
# ULTRA MICRO POWER SOCKET

| UMPS | – | NO. OF POSITIONS | – | LEAD STYLE | – | PLATING OPTION | – | V | – | TAIL | – | WELD TAB | – | "X"R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | –02, –03, –04, –05, –06, –07, –08, –09, –10 | | –03.5 = (03.5 mm) .138"<br>–05.5 = (05.5 mm) .217"<br>–07.5 = (07.5 mm) .295" | | –L = 10 µ" (0.25 µm) Gold on contact, Matte Tin on tail<br>–G = 10 µ" (0.25 µm) Gold on contact, Gold flash on tail<br>–T = Matte Tin | | | | –S = Surface Mount<br>–1 = Through-hole for (1.60 mm) .062" PCB<br>–2 = Through-hole for (2.36 mm) .093" PCB | | –W = Weld Tab Through-hole (Leave blank for no weld tab)<br>–S = Surface Mount Weld Tab | | –TR = Tape & Reel<br>–FR = Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) |

**UMPS**
**Board Mates:**
UMPT
**Standoffs:**
GPSO



–S WELD TAB PRELIMINARY




UMPS-04-03.5-X-V-S-W SHOWN

| NO. OF POSITIONS | A | B | C |
|---|---|---|---|
| –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 |

| UMPT LEAD STYLE | MATED HEIGHT | | |
|---|---|---|---|
| | 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 |
| –12.5 | (16.00) .630 | (18.00) .709 | (20.00) .787 |

## UMPT/UMPS CURRENT RATING (PER CONTACT)

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

**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**



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