



FLEXIBLE POWER

mPOWER™ 2.00 mm PITCH ULTRA MICRO POWER SYSTEM

- Up to 21 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 (see chart)
- Choice of 2, 3, 4 and 5 position counts, 5 mm to 12 mm stack heights available
- Tin or 10 μ" Gold plated power blades; 30 μ" Gold plating available to meet specific regulations
- Optional weld tabs
- Right-angle, rugged shielding and cable assembly in development
- 30 A system currently in development



Shown with Edge Rate® 0.50 mm pitch ERM5/ERF5



mPOWER™

21 A
per power pin

UMPT/UMPS compared to another small form factor power solution

Terminals shown **actual size** at 4 positions



— 21 A/blade



— 21 A/blade

SIGNAL CONNECTOR	MATED HEIGHT			
	5 mm	7 mm	10 mm	12 mm
ADM6/ADF6	X			
BTE/BSE, BTH/BSH, BTS/BSS	X			
ERM5/ERF5		X	X	X
ERM6/ERF6	X			
ERM8/ERF8		X	X	X
LPAM/LPAF	X			
QMS/QFS			X	
QRM8/QRF8		X	X	X
QTE/QSE, QTH/QSH, QTS/QSS	X			
SEAM/SEAF		X	X	X
SEAM8/SEAF8		X	X	
ST4/SS4, ST5/SS5	X			
TEM/SEM		X	X	

System

- **UMPT** – Ultra Micro Power Terminal
- **UMPS** – Ultra Micro Power Socket

CONNECTOR SPECIFICATIONS

CURRENT RATING (PER CONTACT)

PINS	UMPT/UMPS	
	-T	-G
1	17.2 A	21.5 A
2	14.7 A	17.6 A
3	13.1 A	16.8 A
4	13.0 A	15.6 A
5	12.9 A	15.4 A

Ratings are derated 20% and based on 70 °C ambient temperature with maximum allowable rise.

CREEPAGE & CLEARANCE

UMPT/UMPS	
CREEPAGE	2.20 mm
CLEARANCE	1.65 mm

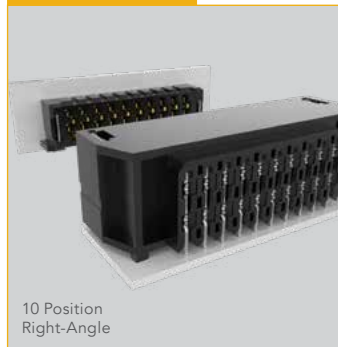
Selectively loading contacts achieves customer specific creepage and clearance requirements. Contact asp@samtec.com

POWER SIMULATION

Samtec now offers power simulation that can calculate temperature increase in the connector area. Contact MicroRuggedGroup@samtec.com for more details.

PRODUCT ROADMAP

PHASE 2



Right-Angle UMPT

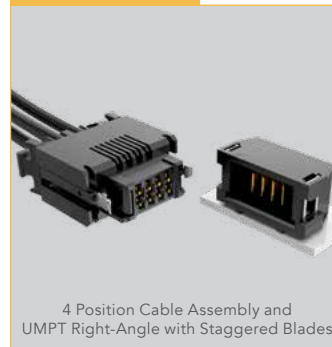
POSITIONS

2, 3, 4, 5, 6, 7, 8, 9, 10

OPTIONS

Latch for mating with cable assembly

PHASE 3



Cable Assembly with Latch

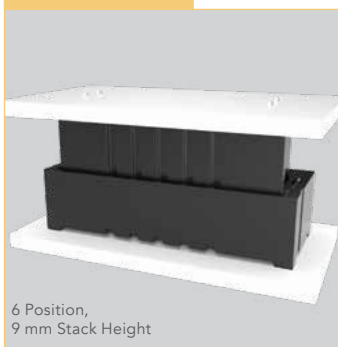
POSITIONS

2, 3, 4, 5, 6, 7, 8, 9, 10

OPTIONS

Plastic top latch or metal side latches

PHASE 4



Vertical UMPT & UMPS

POSITIONS

6, 7, 8, 9, 10

STACK HEIGHTS

6, 8, 9, 11, 13, 14, 15, 16, 18, 20

IN DEVELOPMENT



30 A Ultra Micro Power

POSITIONS

2, 3, 4, 5

STACK HEIGHTS

5, 7, 10, 12

For the latest information about product availability, or to discuss your high-power system application needs, please contact MicroRuggedGroup@samtec.com.