



**THE DATASHEET OF  
MPTC-02-24-02-01-01-L-RA-LC**

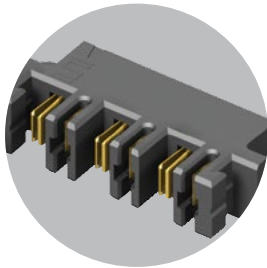


## HIGH POWER SYSTEMS

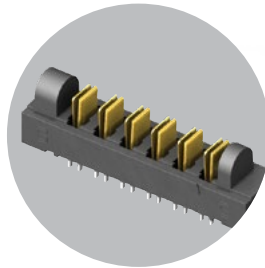
**20-60 A**  
per blade

### FEATURES & BENEFITS

- Current Rating: 23 A - 58.7 A per power blade
- 3.81 mm, 5.00 mm and 6.35 mm pitch
- Dual blade contact system
- Power only or power/signal combinations available
- Right-angle and vertical orientations
- Rugged screw down and locking clip options
- Discrete wire cable assemblies with 10-16 AWG wire (see pages 246-248)
- "Hinged" for unique mating in any orientation from 0° to 90° and space confined applications



Hermaphroditic options  
[samtec.com?MPPT](http://samtec.com?MPPT) and  
[samtec.com?UPPT](http://samtec.com?UPPT)



Hinging options available  
[samtec.com?FMPT](http://samtec.com?FMPT) and  
[samtec.com?FMPS](http://samtec.com?FMPS)

### CREEPAGE & CLEARANCE

SERIES	CREEPAGE	CLEARANCE
UPT/UPS/UPPT	5.50 mm	1.51 mm
MPT/MPS/MPTC/MPSC	2.95 mm	2.71 mm
PET/PES/PETC/PESC	3.66 mm	3.31 mm

Selectively loading contacts achieves customer specific creepage and clearance requirements.

### KEY SPECIFICATIONS

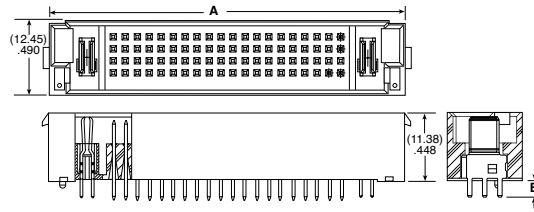
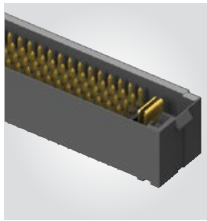
SERIES	PITCH	INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	VOLTAGE RATING	LEAD-FREE SOLDERABLE
UPT/UPS	(3.81 mm) .150"	Black LCP	BeCu	Sn or Au over 50 μ" (1.27 μm) Ni	-55 °C to +105 °C (Sn) -55 °C to +125 °C (Au)	23 A (1 pin powered)	438 VAC	Yes
UPPT	(3.81 mm) .150"	Black LCP	Copper Alloy	Sn or Au over 50 μ" (1.27 μm) Ni	-55 °C to +105 °C (Sn) -55 °C to +125 °C (Au)	21.4 A (1 pin powered)	425 VAC	Yes
MPT/MPS	(5.00 mm) .1969"	Black LCP	Copper Alloy	Sn or Au over 50 μ" (1.27 μm) Ni	-55 °C to +105 °C (Sn) -55 °C to +125 °C (Au)	28.8 A (1 pin powered)	575 VAC	Yes
MPTC/MPSC	(5.00 mm) .197" (pwr) (2.00 mm) .079" (sig)	Black LCP	Signal: Phosphor Bronze Terminal: Copper Alloy	Sn or Au over 50 μ" (1.27 μm) Ni	-55 °C to +105 °C (Sn) -55 °C to +125 °C (Au)	28.8 A (pwr - 1 pin powered) 5 A (sig - 4 pins powered)	250 VAC	Yes
PET/PES	(6.35 mm) .250"	Black LCP	Copper Alloy	Sn or Au over 50 μ" (1.27 μm) Ni	-55 °C to +105 °C (Sn) -55 °C to +125 °C (Au)	58.7 A (1 pin powered)	450 VAC	Yes
PETC/PESC	(6.35 mm) .250" (pwr) (2.54 mm) .100" (sig)	Black LCP	Copper Alloy	Sn or Au over 50 μ" (1.27 μm) Ni	-55 °C to +105 °C (Sn) -55 °C to +125 °C (Au)	31.4 A (pwr - 1 pin powered) 5.7 A (sig - 4 pins powered)	650 VAC (pwr) 450 VAC (sig)	Yes

(5.00 mm) .197"(PWR) / (2.00 mm) .079"(SIG) • 30 A SIGNAL/POWER COMBO SYSTEMS

SERIES	POWER PINS	SIGNAL PINS	POWER PINS	LEAD STYLE	TAIL LENGTH	PLATING OPTION	V	OTHER OPTION
<b>MPTC</b> Terminal	Per end -01	-16 -24	Per end -01	<b>-6.30</b> = (6.30 mm) 0.248" (MPTC only)	<b>-01</b> = Use with (1.60 mm) .062" Thick PCB	<b>-L</b> = 10 μ" (0.25 μm) Gold on contact, Matte Tin on tail (Power & Signal)		<b>-LC</b> = Locking Clip (Manual placement required)
<b>MPSC</b> Socket	-02	-40 -80	-02	<b>-7.70</b> = (7.70 mm) 0.303" (MPSC only)	<b>-03</b> = Use with (2.36 mm) .093" Thick PCB	<b>-T</b> = Matte tin on contact and tail (power), Gold on contact, Matte tin on tail (Signal)		

### MPTC

Board Mates:  
MPSC  
Cable Mates:  
MPCC

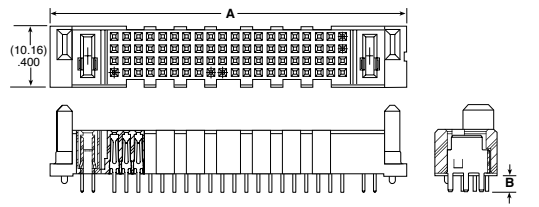
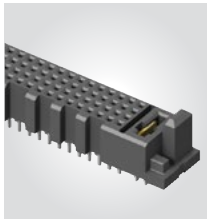


TAIL LENGTH	B
-01	(2.72) .107
-03	(3.51) .138

POWER PINS/ENDS	A			
	16 SIGNAL PINS	24 SIGNAL PINS	40 SIGNAL PINS	80 SIGNAL PINS
-01	(27.44) 1.081	(31.45) 1.238	(39.44) 1.553	(59.44) 2.340
-02	(37.44) 1.474	(41.45) 1.632	(49.44) 1.946	(69.44) 2.734

### MPSC

Board Mates:  
MPTC



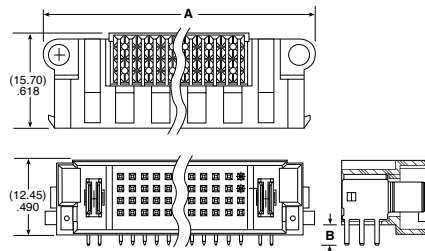
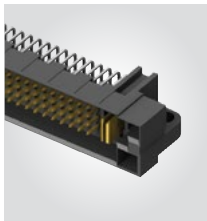
TAIL LENGTH	B
-01	(2.72) .107
-03	(3.52) .139

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

SERIES	POWER PINS	SIGNAL PINS	POWER PINS	01	TAIL LENGTH	PLATING OPTION	RA	OTHER OPTION
<b>MPTC</b> Terminal	Per end -01	-24 -80	Per end -01		<b>-01</b> = Use with (1.60 mm) .062" Thick PCB	<b>-L</b> = 10 μ" (0.25 μm) Gold on contact, Matte Tin on tail (Power & Signal)		-SD or -LC is a required callout
<b>MPSC</b> Socket	-02		-02		<b>-03</b> = Use with (2.36 mm) .093" Thick PCB	<b>-T</b> = Matte Tin on contact and tail (power), Gold on contact, Matte tin on tail (Signal)		<b>-SD</b> = Screw Down
								<b>-LC</b> = Locking Clip (Manual placement required)

### MPTC-RA

Board Mates:  
MPSC  
Cable Mates:  
MPCC

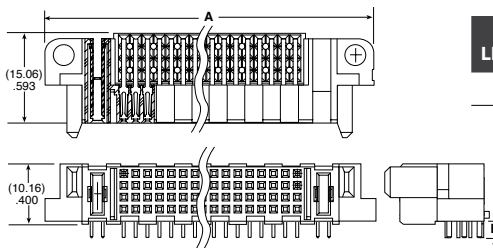


TAIL LENGTH	B
-01	(2.72) .107
-03	(3.51) .138

POWER PINS/ENDS	A	
	24 SIGNAL PINS	80 SIGNAL PINS
-01	(35.25) 1.388	(63.25) 2.490
-02	(45.25) 1.781	(73.25) 2.884

### MPSC-RA

Board Mates:  
MPTC



TAIL LENGTH	B
-01	(2.20) .087
-03	(3.00) .118

POWER PINS/ENDS	A	
	24 SIGNAL PINS	80 SIGNAL PINS
-01	(36.52) 1.438	(64.52) 2.540
-02	(46.52) 1.831	(74.52) 2.934

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

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

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- [View MPTC-02-24-02-01-01-L-RA-LC on WIN SOURCE](#)
- [Samtec Inc. Information](#)

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