

2.00mm I/O PCB Connector



2.00mm I/O PCB connectors are compatible with through-hole and surface mount PCB layout, feature Auto-mounting and are ideal for servo motor connectors and amplifiers.

Features and Advantages

Auto-mounting option
Saves time and improves operation efficiency

Stand-off design for reflow soldering

Change raw material for reflow-soldering



2.00mm I/O All Variants



53984-0681



53462 Series

53460 53984	Existing product	New product Reflow type
Housing	PA46	LCP
Shell	Phosphor Bronze	Phosphor Bronze
Terminal	Brass	Brass
Packing	Soft tray	Semi hard tray



53460-0639

55445	Existing product	New product Reflow type
Housing	LCP	LCP
Shell	SPCC	Phosphor Bronze
Terminal	Phosphor Bronze	Phosphor Bronze
Packing	Soft tray	Semi hard tray



55445-1029

Applications

Servo Motor Controller & Amplifier



Servo motor controller for Robot Arm



Servo motors

2.00mm I/O PCB Connector



Specifications

REFERENCE INFORMATION

Terminal Used:
R/A Plug: Brass (P/N53460, 53984, 53462)
Phosphor Bronze (P/N 55445)
Plug Crimp Terminal: Phosphor Bronze
Receptacle: Phosphor Bronze
Designed In: mm
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: No

PHYSICAL

Housing: PCB Plug: LCP
Junction Cable Plug: PBT
Receptacle: PBT
Contact: Phosphor Bronze
53460 Series: Brass
Shell: Phosphor Bronze

Contact Area:
6 and 8 Circuit: Gold 0.76micrometermin.
10 Circuit: Gold 0.3micrometer min.
Solder Tail Area: Tin 1.0micrometer min.
Underplating: Nickel 2.0mictometer min.
Finish: Tin 1.0micrometer min.
Underplating: Nickel 1.27mictometer min.

MECHANICAL

Mating Force: 39.2N/max.
Un-mating Force:
6 and 8 Circuit: 9.8N min.
10 Circuit: 2.45N min.
Repeated Mating/Un-mating :
6 and 8 Circuit: 1,500 Cycles
10 Circuit: 50 Cycles
Durability (min.): 6 and 8 Circuit :750 Cycles
Cable Axial Pull Test: 6 and 8 Circuit: 98N@1min.
Latch Strength 6 and 8 Circuit: 98N@1min.

ELECTRICAL

Voltage (max.): 6 Circuit: 40V
8 and 10 Circuit: 125V
Current (max.):
6 Circuit: 1.5A@22 AWG
8 and 10 Circuit: 2.0A@22 AWG
Contact Resistance: 30 milliohms max.
Dielectric Withstanding Voltage:
6 Circuit : DC500V 1min.
8 Circuit : AC350V 1min.
10 Circuit : AC500V 1min.
Insulation Resistance:
6 and 10 Circuit: 100 Megaohms min.
8 Circuit: 1000 Megaohms min.
PCB Thickness: 1.6mm
Operating Temperature: 6 Circuit : -25 to +85°C
8 and 10 Circuit : -40 to +85°C

Ordering Information

6 CIRCUIT PCB SOCKET

Product	Upright T/H	Right Angle T/H	Right Angle SMT
	53460-0639 (Semi-Hard Tray)	53984-0681 (Semi-Hard Tray)	53462-0629 (Soft Tray) 53462-0001 (Tape & Reel)
Picture			

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Ordering Information

6 CIRCUIT CABLE PLUG & WIRE-TO-WIRE SOCKET

Product	Cable Plug Connector		Wire to Wire Socket Connector		
	Soldering type	Crimp type	Soldering type	Crimp type	Crimp type Panel mount
Picture					
Kit Part No.	55100-0670 (Bag)	500654-0609 (Bag)	54280-0609	500655-0609	500655-0619
	55100-0680 (Tray & Box)	500654-0619 (Tray & Box)			
Housing	54180-0619	51145-0601	53988-0619	500653-0619	500653-0619
Shell Cover	58299-0626	58299-0626	58302-0628	58302-0628	58302-0628
Shell Body	58300-0626	58300-0626	N/A	N/A	N/A
Mold Cover A (w/L)	54181-0615	54181-0615	N/A	N/A	N/A
Mold Cover B	54182-0605	54182-0605	N/A	N/A	N/A
Wire-to-Wire Mold Cover A	N/A	N/A	53989-0605	53989-0605	53989-0615
Wire-to-Wire Mold Cover B	N/A	N/A	53990-0605	53990-0605	53990-0615
Cable Cramp	58303-0000	58303-0000	58303-0000	58303-0000	58303-0000
Cramp Screw (M2×2)	59832-0009	59832-0009	59832-0009	59832-0009	59832-0009
Plug Crimping Term *	N/A	50639-8028	N/A	N/A	N/A
Wire-to-Wire Socket Crimping Term *	N/A	N/A	N/A	500145-0128	500145-0128

Ordering Information

8 CIRCUIT CABLE PLUG & WIRE-TO-WIRE SOCKET

Product	Cable Plug Connector		Wire to Wire Socket Connector		
	Soldering type	Crimp type	Soldering type	Crimp type	Crimp type Panel mount
Picture					
Kit Part No.	55100-0870	500654-0809	54280-0809	500655-0819	500655-0819
HSG	54180-0819	51145-0801	53988-0819	500653-0819	500653-0819
Shell Cover	58299-0826	58299-0826	58302-0828	58302-0828	58302-0828
Shell Body	58300-0826	58300-0826	N/A	N/A	N/A
Mold Cover A (w/L)	54181-0815	54181-0815	N/A	N/A	N/A
Mold Cover B	54182-0805	54182-0805	N/A	N/A	N/A
W-to-W Mold Cover A	N/A	N/A	53989-0805	53989-0805	53989-0805
W-to-W Mold Cover B	N/A	N/A	53990-0805	53990-0805	53990-0815
Cable Cramp	58303-0000	58303-0000	58303-0000	58303-0000	58303-0000
Cramp Screw(M2×2)	59832-0009	59832-0009	59832-0009	59832-0009	59832-0009
Plug Crimping Term *	N/A	50639-8028	N/A	N/A	N/A
Wire-to-Wire Socket Crimping Term *	N/A	N/A	N/A	500145-0128	500145-0128

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Ordering Information

10 CIRCUIT PCB SOCKET

Product	Upright T/H		
	55445-1029		
Picture			

Ordering Information

10 CIRCUIT CABLE PLUG

Product	Cable Plug Connector	
	Soldering type	Crimping type
Picture		
Kit Part No.	54599-1016 (Black)	54599-1026 (Black)
	54599-1019 (Gray)	
Housing	54593-1016	51209-1001
Shell Cover	58935-1028	58935-1028
Shell Body	58934-1028	58934-1028
Mold Cover A (w/L)	54594-1016 (Black)	54594-1016 (Black)
	54594-1015 (Gray)	
Mold Cover B	54595-1006 (Black)	54595-1006 (Black)
	54595-1005 (Gray)	
Cable Cramp	58937-0000	58937-0000
Cramp Screw(M2×2)	58203-0010	58203-0010
Plug Crimping Term *	N/A	59351-8028

www.molex.com/link/2.0mm-io-pcb-connectors.html

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