



Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Receptacle**

PCB Mount Orientation: **Vertical**

Connector System: **Board-to-Board**

Number of Positions: **20**

Number of Rows: **2**

Features

Product Type Features

PCB Connector Type	PCB Mount Receptacle
Connector System	Board-to-Board
Header Type	Fully Shrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

Configuration Features

Board-to-Board Configuration	Orthogonal, Parallel
Stackable	Yes
PCB Mount Orientation	Vertical
Number of Positions	20
Number of Rows	2

Electrical Characteristics

Operating Voltage	30 VAC
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Insulation Resistance	5000 MΩ
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Body Features

PCB Retention Feature Material	Copper Alloy
PCB Retention Feature Plating Material	Tin
Primary Product Color	Black

Contact Features

Contact Mating Area Plating Material Thickness	.762 μm[30 μin]
Mating Square Post Dimension	.38 mm[.015 in]
PCB Contact Termination Area Plating Material Thickness	3.81 μm[150 μin]
Contact Layout	Matrix
Contact Base Material	Phosphor Bronze
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Receptacle
Contact Current Rating (Max)	3.6 A

Termination Features

Rectangular Termination Post & Tail Width	.2 mm[.008 in]
Rectangular Termination Post & Tail Thickness	.38 mm[.015 in]
Termination Method to PCB	Surface Mount

Mechanical Attachment

PCB Mount Retention Type	Boardlock
PCB Mount Retention	With
PCB Mount Alignment	With
Connector Mounting Type	Board Mount
Mating Alignment	Without

Housing Features

Housing Material	Thermoplastic
Centerline (Pitch)	1.27 mm[.05 in]

Dimensions

Row-to-Row Spacing	2.54 mm[.1 in]
Stack Height	13.08 mm[.514 in]
Connector Width	5.03 mm[.198 in]



PCB Thickness (Recommended)	1.57 mm[.062 in]
Connector Height	9.4 mm[.37 in]
Connector Length	13.82 mm[.544 in]

Usage Conditions

Operating Temperature (Max)	105 °C[221 °F]
Operating Temperature Range	-65 – 105 °C[-85 – 221 °F]

Operation/Application

Solder Process Feature	Board Standoff
Circuit Application	Signal

Industry Standards

Compatible With Agency/Standards Products	UL
Compatible With Approved Standards Products	CSA LR7189, UL E28476
UL Flammability Rating	UL 94V-0

Packaging Features

Packaging Quantity	26
Packaging Method	Tube

Product Compliance

For compliance documentation, visit the product page on [TE.com](#)>

EU RoHS Directive 2011/65/EU	Compliant
EU ELV Directive 2000/53/EC	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JAN 2025 (247) Candidate List Declared Against: JAN 2025 (247) Does not contain REACH SVHC
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Reflow solder capable to 260°C

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these



limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

Compatible Parts

TE Part # 5-104118-7
20 SYS 50 HDR DRRRA UNSHRD SN

TE Part # 5-104069-1
20 sys 50 hdr drra shrd sn

TE Part # 2-1825601-0
20 SYS50 SMT HDR DR SHD W/O CAP

TE Part # 5-147377-2
20 SYS50 SMT HDR DR SHD SN

TE Part # 5-104666-1
20 SYSTEM 50 HDR DRST SHRD SN

TE Part # 5-104068-1
20 SYSTEM 50 HDR DRST SHRD

TE Part # 5-104477-2
20 SYSTEM 50 HDR DRRRA SHRD SN

TE Part # 5-104549-2
20 SYS50 S/M HDR DRST SHRDSN

TE Part # 5-103916-2
20 SYS 50 HDR DRST UNSHRD SN

Also in the Series | AMPMODU System 50

Board-to-Board Headers & Receptacles(685)

PCB Headers & Receptacles(685)

Rectangular Power Connectors(47)

Wire-to-Board Headers & Receptacles (47)

Customers Also Bought



TE Part #1-2176058-7
RLP73M 3A R047 5% 2K RL

TE Part #1-5747871-6
09 PLUG SP/FMS SCRLK

TE Part #350732-1
06P UMNL PIN HDR ASSY 94VO

TE Part #5646533-1
2MM HM,TYPE A/B,HDR,ASY,146POS

TE Part #2-640497-4
02P MR HDR ASSY

TE Part #1-747299-6
15 RCPT SP/FMS SCRLK

TE Part #640467-3
05P UMNL HDR ASSY LF

TE Part #350829-4
12P UMNL HDR ASSY PC 94VO LF

TE Part #5352131-1
Z-PACK/B RAMH.110P.

TE Part #3-794682-8
08P MICRO MNL ASSY,VRT,THRU,LF

Documents

Product Drawings

20 SYS50 SURFMNT DRST RCPT SN

English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_5-104550-2_S.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_5-104550-2_S.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_5-104550-2_S.3d_stp.zip

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages



AMPMODU_INTERCONNECTION_SYSTEM_SECTION3AND4

English

Fine Pitch Stacking Connectors - 1.27mm AMPMODU System 50 Connectors

English

AMPMODU SYSTEM 50 QUICK REFERENCE GUIDE

English

AMPMODU SYSTEM 50

English

Product Specifications

Application Specification

English