

6-104178-1 ✓ ACTIVE

AMPMODU | AMPMODU System 50

TE Internal #: 6-104178-1

PCB Mount Header, Vertical, Board-to-Board, 20 Position, 1.27 mm
[.05 in] Centerline, Unshrouded, Gold, Through Hole - Solder,
AMPMODU System 50

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Connectors > PCB Connectors > PCB Headers & Receptacles

PCB Connector Assembly Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

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

Number of Positions: **20**

Number of Rows: **1**

Features

Product Type Features

PCB Connector Assembly Type	PCB Mount Header
Connector System	Board-to-Board
Header Type	Unshrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

Configuration Features

Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Vertical
Number of Positions	20
Number of Rows	1
Board-to-Board Configuration	Parallel

Electrical Characteristics

Dielectric Withstanding Voltage (Max)	500 VAC
Insulation Resistance	5000 MΩ
Operating Voltage	30 VAC

Body Features

Primary Product Color	Black
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Contact Features

Mating Square Post Dimension	.38 mm[.015 in]
PCB Contact Termination Area Plating Material Thickness	3.81 – 6.35 μm[150 – 250 μin]



PCB Contact Termination Area Plating Material Finish	Matte
Contact Shape & Form	Rectangular
Contact Underplating Material	Nickel
PCB Contact Termination Area Plating Material	Tin
Contact Base Material	Copper Alloy
Contact Mating Area Plating Material	Gold
Contact Mating Area Plating Material Thickness	.76 μm [30 μin]
Contact Type	Pin
Contact Current Rating (Max)	3.6 A

Termination Features

Round Termination Post & Tail Diameter	.38 mm[.015 in]
Termination Post & Tail Length	2.54 mm[.1 in]
Termination Method to Printed Circuit Board	Through Hole - Solder

Mechanical Attachment

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

Housing Features

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

Dimensions

PCB Thickness (Recommended)	1.57 mm[.062 in]
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Usage Conditions

Housing Temperature Rating	High
Operating Temperature Range	-65 – 105 $^{\circ}\text{C}$ [-85 – 221 $^{\circ}\text{F}$]

Operation/Application

Solder Process Feature	Board Standoff
Circuit Application	Signal

Industry Standards

UL Rating	Recognized
Agency/Standard	CSA, UL



Approved Standards	CSA LR7189, UL E28476
UL Flammability Rating	UL 94V-0

Packaging Features

Packaging Quantity	100
Packaging Type	Box, Carton

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: JUNE 2023 (235) Candidate List Declared Against: JAN 2023 (233) 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	Wave 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 # CAT-F439-R2435127
FFC Receptacle Housing: 1.27mm

TE Part # 5-104196-5
20 SYSTEM 50 RCPT ASSY SRRA SN

TE Part # 5-104192-5
20 SYSTEM 50 RCPT ASSY SRS SN

Also in the Series | AMPMODU System 50

PCB Headers & Receptacles(1012)

Customers Also Bought

TE Part #566586-000
202K163-25/225-0

TE Part #117451-000
222K121-25/225-0

TE Part #1-826632-3
AMPMODU II PIN HEADER 13P

TE Part #8-1676481-3
CPF 0603 22K 0.1% 25PPM 1K RL

TE Part #2176372-1
RQ 0603 49K9 0.1% 10PPM 5K RL

TE Part #6-2176455-3
CPF 0402 487K 0.1% 25ppm 1K RL

Documents

Product Drawings

20 SYS 50 HDR SRST UNSHRD SN

English

CAD Files

3D PDF

3D



Customer View Model

[ENG_CVM_CVM_6-104178-1_T.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_6-104178-1_T.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_6-104178-1_T.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

Product Specifications

[Application Specification](#)

English

Product Environmental Compliance

[TE Material Declaration](#)

English