

5-104652-2 ✓ ACTIVE

AMPMODU | AMPMODU 50/50 Grid

TE Internal #: 5-104652-2

PCB Mount Receptacle, Vertical, Board-to-Board, 20 Position, 1.27 mm [.05 in] Centerline, Gold, Surface Mount, Signal, Black, AMPMODU 50/50 Grid

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Connectors > PCB Connectors > PCB Headers & Receptacles

PCB Connector Assembly 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 Assembly Type	PCB Mount Receptacle
Connector System	Board-to-Board
Connector & Contact Terminates To	Printed Circuit Board

### Configuration Features

PCB Mount Orientation	Vertical
Number of Positions	20
Number of Rows	2
Board-to-Board Configuration	Parallel

### Electrical Characteristics

Insulation Resistance	5000 MΩ
Operating Voltage	30 VAC

### Body Features

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

### Contact Features

	150 μin
Mating Pin Diameter	.46 mm[.018 in]
PCB Contact Termination Area Plating Material	Tin
Contact Base Material	Copper Alloy



Contact Mating Area Plating Material	Gold
Contact Mating Area Plating Material Thickness	.762 μm[30 μin]
Contact Type	Socket
Contact Current Rating (Max)	.5 A

### Termination Features

Rectangular Termination Post & Tail Thickness	.08 mm[.003 in]
Rectangular Termination Post & Tail Width	.36 mm[.014 in]
Termination Method to Printed Circuit Board	Surface Mount

### Mechanical Attachment

PCB Mount Retention Type	Hold-Down Post
Mating Alignment	With
Mating Alignment Type	Polarizing Tab
PCB Mount Retention	With
PCB Mount Alignment	Without
Connector Mounting Type	Board Mount

### Housing Features

Centerline (Pitch)	1.27 mm[.05 in]
Housing Material	LCP - GF (Liquid Crystal Polymer)

### Dimensions

Connector Height	4.75 mm[.187 in]
Row-to-Row Spacing	1.27 mm[.05 in]
PCB Thickness (Recommended)	1.57 mm[.062 in]

### Usage Conditions

Operating Temperature Range	-65 – 105 °C[-85 – 221 °F]
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### Operation/Application

Solder Process Feature	Board Standoff
Circuit Application	Signal

### Industry Standards

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

### Packaging Features

Packaging Quantity	31
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Packaging Type

Box, 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: 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

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 # 5-104693-2  
20 50/50 HDR DRST SFMNT.390 SN

TE Part # 5-104655-3  
20 50/50 HDR DRST SFMNT TIN

TE Part # 5-104656-2  
20 50/50 HDR DRST SFMNT.320 SN

TE Part # 5-104894-2  
20 50/50 GRID RA HDR LF



TE Part # 5-147381-2  
20 50/50 HDR SMT.250 W/HD SN

TE Part # 5-147383-2  
20 50/50 HDR SMT.390 W/HD VC

TE Part # 5-104892-2  
20 50/50 GRID RCPT W/LTCH LF

TE Part # 5-104895-2  
20 50/50 GRID RA HDR W/LTCH LF

TE Part # 5-147382-2  
20 50/50 HDR SMT.320 W/HD SN

TE Part # 5-1571424-3  
20 50/50 HDR DRST TH TIN

TE Part # 5-2267258-2  
20 50/50 HDR TH/PIp.250 W/HD SN

TE Part # 5-2267259-2  
20 50/50 HDR TH/PIp.320 W/HD SN

TE Part # 5-2267260-2  
20 50/50 HDR TH/PIp.390 W/HD VC

TE Part # 5-2267255-2  
20 50/50 HDR DRST TH.320 SN

TE Part # 5-2267256-2  
20 50/50 HDR DRST TH.390 SN

### Also in the Series | AMPMODU 50/50 Grid

Insertion & Extraction Tools(1)

PCB Connector Covers(9)

PCB Headers & Receptacles(302)

Ribbon Cable Connectors(34)

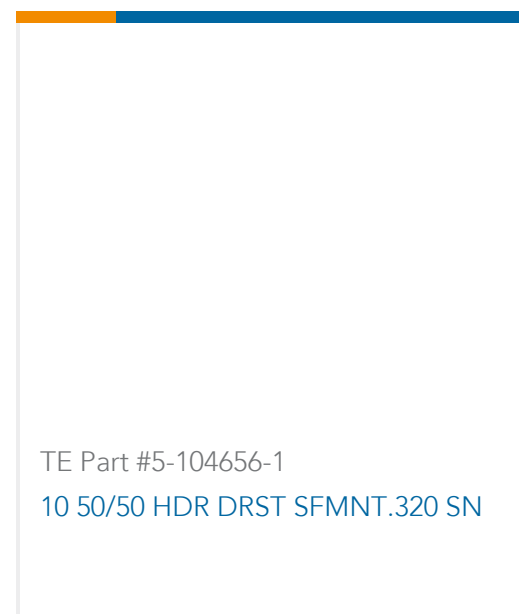
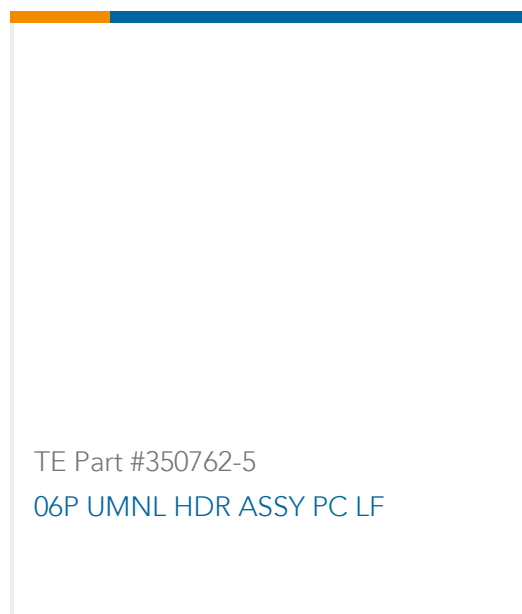
### Customers Also Bought

TE Part #8-1879233-5  
SMD Power Resistor: 7 Watt, 0.10-500 Ohm

TE Part #487545-3  
006 HOUSING FFC RCPT 050CL SR

TE Part #5-1879233-7  
SMD Power Resistor: 7 Watt, 200-2M Ohm

TE Part #5-104652-1  
10 50/50 GRID DRST SFMNT RCPT



## Documents

### Product Drawings

[20 50/50 GRID DRST SFMNT RCPT](#)

English

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_5-104652-2\\_L.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_5-104652-2\\_L.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_5-104652-2\\_L.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\\_SECTION1AND2](#)

English

[Ribbon Cable Interconnect Solutions](#)

English

[Fine Pitch Stacking Connectors - 1.27mm AMPMODU 50/50 Grid Connectors](#)

English

[Stacking Connectors Quick Reference Guide \(English\)](#)

English

### Product Specifications

[Application Specification](#)

English

### Agency Approvals

[UL Report](#)

English

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