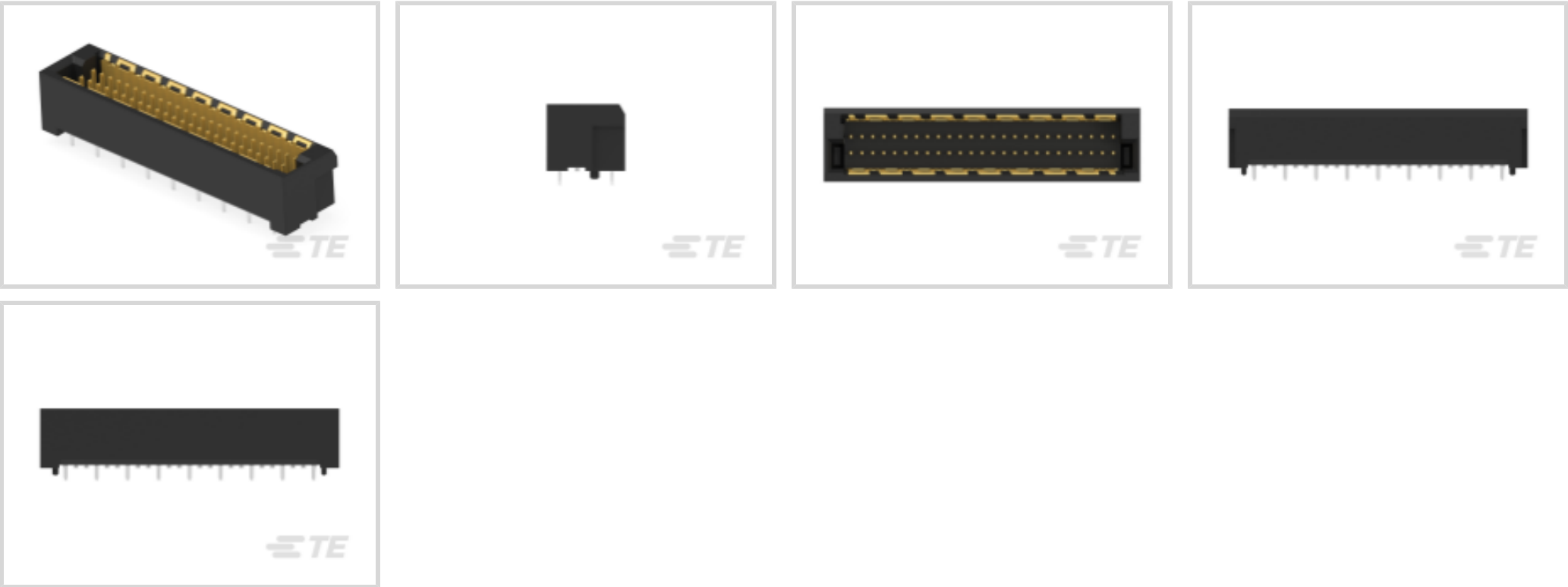




Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Header**

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

Number of Positions: **50**

Number of Rows: **2**

Centerline (Pitch): **1 mm [.039 in]**

Features

Product Type Features

PCB Connector Type	PCB Mount Header
Connector System	Board-to-Board
Header Type	Fully Shrouded
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

Configuration Features

Number of Columns	25
Number of Loaded Positions	50
Connector Contact Load Condition	Fully Loaded
Stackable	Yes
Number of Positions	50
Number of Rows	2
PCB Mount Orientation	Vertical
Board-to-Board Configuration	Orthogonal, Parallel



Electrical Characteristics

Dielectric Withstanding Voltage (Max)	500 Vrms
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Signal Characteristics

Data Rate	25 Gb/s
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Body Features

Primary Product Color	Black
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Contact Features

PCB Contact Termination Area Plating Material Thickness	4 – 6 µm[157.48 – 236.22 µin]
Contact Layout	Matrix
Contact Mating Area Length	2.9 mm[.114 in]
Contact Base Material	Copper Alloy
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Pin
Contact Current Rating (Max)	1 A

Termination Features

Termination Method to PCB	Through Hole - Solder
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Mechanical Attachment

Mounting Alignment Feature Length	.65 mm[.025 in]
Mating Retention	With
PCB Mount Alignment Type	Locating Posts
Mating Alignment Type	Blindmate, Polarization
Connector Mounting Type	Board Mount
Mating Alignment	With
PCB Mount Alignment	With
PCB Mount Retention	With

Housing Features

Centerline (Pitch)	1 mm[.039 in]
Housing Material	Liquid Crystal Polymer (LCP)

Dimensions

Connector Height	5.8 mm[.228 in]
Connector Length	28.95 mm[1.139 in]

Row-to-Row Spacing	1.5 mm[.059 in]
Stack Height	2 mm

Usage Conditions

Operating Temperature (Max)	125 °C[257 °F]
Operating Temperature Range	-55 – 125 °C[-67 – 257 °F]

Operation/Application

Circuit Application	High Speed Data, Signal
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Industry Standards

Compatible With Agency/Standards Products	IEC, UL
Compatible With Approved Standards Products	UL E84703
UL Flammability Rating	UL 94V-0

Packaging Features

Packaging Method	Tape & Reel
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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	有害物质含量符合标准要求 No Restricted Substance(s) Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2025 (250) Candidate List Declared Against: JUNE 2023 (235) Does not contain REACH SVHC
Halogen Content	Low Halogen - Br, Cl, F < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Not reviewed for solder process capability

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 # 254876-E
MSPEED 50 F SMD F4 B AB VV 137 094 * * E

TE Part # 354177-E
MSPEED 50 F SMDTHR F6 B AB VV 137 094 *

TE Part # 354175-E
MSPEED 50 F SMDTHR F4 B AB VV 137 094 *

TE Part # 354182-E
MSPEED 50 M SMDTHR M1 B AB VV 137 094 *

TE Part # 354178-E
MSPEED 50 F SMD F8 B AB VV 137 094 * * E

TE Part # 354176-E
MSPEED 50 F SMD F6 B AB VV 137 094 * * E

TE Part # 354180-E
MSPEED 50 F SMD F10 B AB VV 137 094 * *

TE Part # 354179-E
MSPEED 50 F SMDTHR F8 B AB VV 137 094 *

TE Part # 354181-E
MSPEED 50 F SMDTHR F10 B AB VV 137 094 *

Also in the Series | ERNI MicroSpeed

Board-to-Board Headers & Receptacles(60)

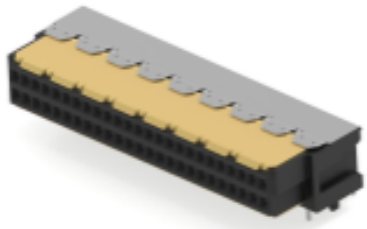
PCB Headers & Receptacles(67)

Rectangular Power Connectors(50)

Wire-to-Board Headers & Receptacles (7)

Customers Also Bought





TE Part #374719-E
MSPEED 50 F SMDTHR * 90E AB VV
137 094 1



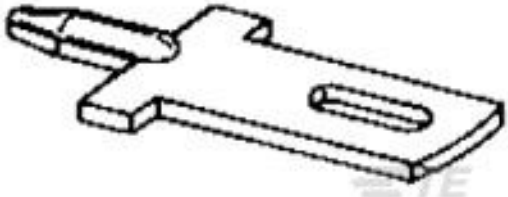
TE Part #816484-SF
RN102-0.3-02-12M



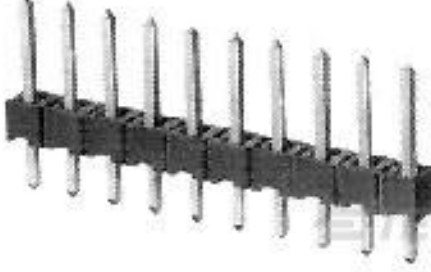
TE Part #1-84953-1
1MM FPC HORZ.TOP CONT.ASSY 11P



TE Part #292304-1
STD USB TYPE B, R/A, T/H



TE Part #735187-2
110 FASTON TAB TPBR



TE Part #826629-3
3P AMPMODU II



TE Part #826632-4
4P AMPMODU II PIN HDR.



TE Part #1473005-1
SEMI HARD TRAY DDR SOCKET 200P



TE Part #3-6318491-6
.5FHP08H,220,S,GIG,08/Sn,HT,NSYes

Documents

Product Drawings

MSPEED 50 M SMDTHR M2 B AB VV 137 094 *

German

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_354184-E_F1.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_354184-E_F1.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_354184-E_F1.3d_stp.zip

English

By downloading the CAD file I accept and agree to the Terms and Conditions of use.

Datasheets & Catalog Pages

354184-E

PCB Mount Header, Vertical, Board-to-Board, 50 Position, 1 mm [.039 in] Centerline, Fully Shrouded, Gold (Au), Through Hole - Solder, ERNI MicroSpeed



[Datasheet - ERNI Microspeed 1.0mm Connectors](#)

[Datasheet - ERNI Microspeed 1.0mm Connectors](#)

English