

224559-E ✓ ACTIVE

ERNI | ERNI MicroSpeed

TE Internal #: 224559-E

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

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Connectors > PCB Connectors > PCB Headers & Receptacles



EU RoHS Compliance: **Compliant**

EU ELV Compliance: **Compliant**

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

PCB Mount Orientation: **Vertical**

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

Features

Other

EU RoHS Compliance	Compliant
EU ELV Compliance	Compliant

Product Type Features

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

Configuration Features

Number of Columns	25
Number of Loaded Positions	50
Stacking Configuration	Stack Through
Connector Contact Load Condition	Fully Loaded
Stackable	Yes



PCB Mount Orientation	Vertical
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Number of Positions	50
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Number of Rows	2
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Electrical Characteristics

Impedance	100 Ω
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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]
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Contact Shape & Form	Rectangular
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Contact Layout	Matrix
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Contact Mating Area Length	2.9 mm[.114 in]
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Contact Base Material	Copper Alloy
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PCB Contact Termination Area Plating Material	Tin
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Contact Mating Area Plating Material	Gold (Au)
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Contact Type	Pin
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Contact Current Rating (Max)	1 A
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Termination Features

Termination Method to PCB	Surface Mount
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Mechanical Attachment

Mounting Alignment Feature Length	.65 mm[.025 in]
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Mating Alignment Type	Polarizing Rib
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PCB Mount Alignment Type	Locating Posts
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PCB Mount Retention	Without
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PCB Mount Alignment	With
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Connector Mounting Type	Board Mount
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Mating Alignment	With
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Housing Features

Mating Entry Location	Top
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Housing Material	LCP
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Centerline (Pitch)	1 mm [.039 in]
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Dimensions

Row-to-Row Spacing	1.5 mm [.059 in]
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Stack Height	9 mm [.354 in]
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Connector Width	5.85 mm [.23 in]
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Connector Height	12.8 mm [.504 in]
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Profile Height from PCB	12.8 mm [.504 in]
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Connector Length	26.95 mm [1.061 in]
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Usage Conditions

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

Assembly Process Feature	Pick and Place Cover
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Shielded	No
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Circuit Application	Power, Signal & High Speed Data
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Industry Standards

Compatible With Agency/Standards Products	DIN, UL
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Industry Standard	IEC
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Compatible With Approved Standards Products	UL
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UL Flammability Rating	UL 94V-0
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Packaging Features

Packaging Reel Diameter	330 mm [12.99 in]
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Packaging Quantity	220
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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
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EU ELV Directive 2000/53/EC	Compliant
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China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
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EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2024 (241)
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Candidate List Declared Against: JUNE 2024 (241)

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

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 # 144662-E
MSPEED 50 F SMD F4 * AB W 137 094
** E



TE Part # 144663-E
MSPEED 50 F SMDTHR F4 * AB W 137 094 *



TE Part # 224512-E
MSPEED 50 F SMD F6 * AB W 137 094
** E



TE Part # 224513-E
MSPEED 50 F SMDTHR F6 * AB W 137 094 *



TE Part # 224514-E
MSPEED 50 F SMD F8 * AB W 137 094
** E



TE Part # 224515-E
MSPEED 50 F SMDTHR F8 * AB W 137 094 *



TE Part # 224516-E
MSPEED 50 F SMD F10 * AB W 137 094 **



TE Part # 224517-E
MSPEED 50 F SMDTHR F10 * AB W 137 094 *

Also in the Series | **ERNI MicroSpeed**



PCB Headers & Receptacles(76)

Customers Also Bought

TE Part #4515-DS3A010DPF
PRESS XDCR, ANALOG, INH20 RANGETE Part #4525-DS3A030DPF
PRESS XDCR, ANALOG, PSI RANGETE Part #144662-E
MSPEED 50 F SMD F4 * AB VV 137 094
* * ETE Part #154741-E
SMCQ 26 F AB VV 7-03 CL * 0007 137
E002TE Part #214547-E
MSPPM 5 F SMD F6 * A V 137 094 *
E008 JTE Part #224512-E
MSPEED 50 F SMD F6 * AB VV 137 094
* * ETE Part #224557-E
MSPEED 50 M SMD M2 * AB VV 137
094 * * ETE Part #364767-E
M12 MALE, A CODE, 5P, 17MM SMTTE Part #394339-E
M12 MALE, UNI CODE. 4P, 10.5MM
SMT, DITE Part #474331-E
M12 MALE, UNI CODE, 5P, 10.5MM
SMT, DI

Documents

Product Drawings

[MSPEED 50 M SMD M9 * AB VV 137 176 * * E](#)

English

[MSPEED 50 M SMD M9 * AB VV 137 176 * * E](#)

German

CAD Files

Customer View Model

[ENG_CVM_CVM_224559-E_1.3d_stp.zip](#)



English

Customer View Model

[ENG_CVM_CVM_224559-E_1.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_224559-E_1.3d_igs.zip](#)

English

3D PDF

3D

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

Datasheets & Catalog Pages

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

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

English