

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



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

PCB Mount Orientation: **Vertical**

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

Number of Positions: **50**

Number of Rows: **2**

Features

Product Type Features

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

Configuration Features

Stacking Configuration	Stack Through
Number of Columns	25
Number of Loaded Positions	50
Stackable	Yes
Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Vertical
Number of Positions	50
Number of Rows	2

Electrical Characteristics

Dielectric Withstanding Voltage (Max)	500 Vrms
Impedance	100 Ω

Signal Characteristics

Data Rate	25 Gb/s
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Body Features

Primary Product Color	Black
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Contact Features

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

Termination Features

Termination Method to Printed Circuit Board	Surface Mount
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Mechanical Attachment

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

Housing Features

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

Dimensions

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

Usage Conditions

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

Operation/Application

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

Industry Standards

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

Packaging Features

Packaging Reel Diameter	330 mm[12.99 in]
Packaging Quantity	220
Packaging Method	Tape & Reel

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	Not Yet Reviewed
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 2024 (240) Candidate List Declared Against: JUNE 2023 (235) Does not contain REACH SVHC
Halogen Content	Not Yet Reviewed for halogen content

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 VV 137 094
** E



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



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



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



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



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



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



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

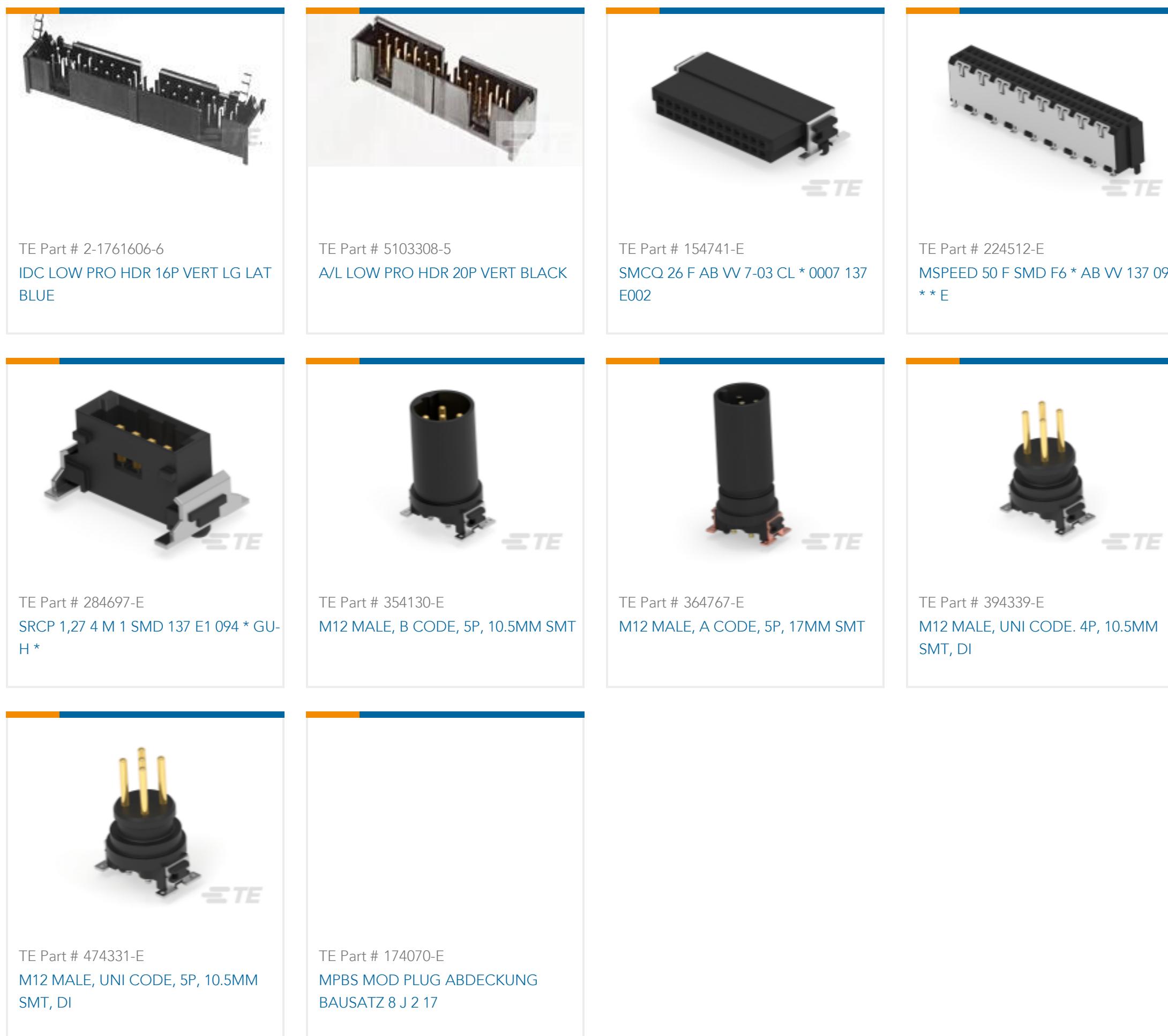
Also in the Series

ERNI MicroSpeed



PCB Headers & Receptacles(76)

Customers Also Bought



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

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