

254415-E ✓ ACTIVE

ERNI | ERNI SMC

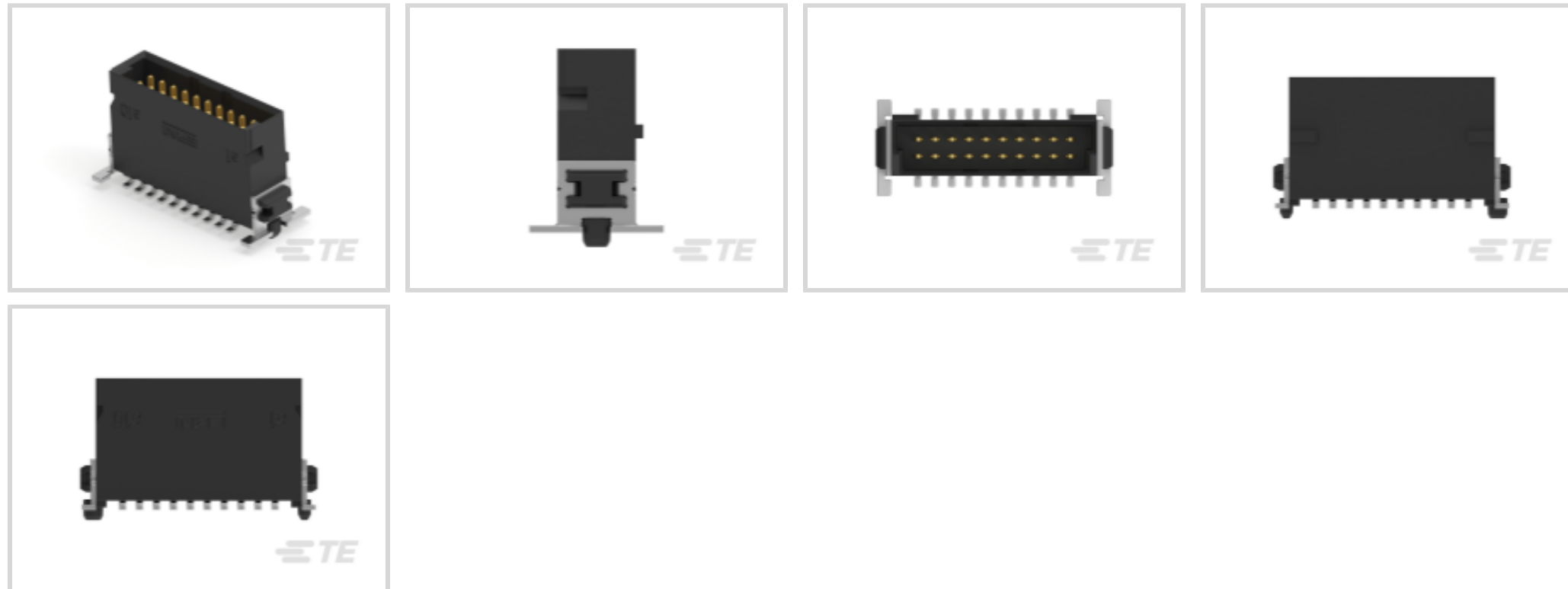
TE Internal #: 254415-E

PCB Mount Header, Vertical, Board-to-Board, 20 Position, 1.27 mm  
[.05 in] Centerline, Fully Shrouded, Gold (Au), Surface Mount, ERNI  
SMC

[View on TE.com >](#)



Connectors > PCB Connectors > PCB Headers & Receptacles



EU RoHS Compliance: **Compliant**

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

PCB Mount Orientation: **Vertical**

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

Number of Positions: **20**

## Features

### Other

EU RoHS Compliance	Compliant
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### 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

Number of Columns	10
Number of Loaded Positions	20
Stacking Configuration	Stack Through
Connector Contact Load Condition	Fully Loaded
Board-to-Board Configuration	Parallel
Stackable	Yes



PCB Mount Orientation	Vertical
Number of Positions	20
Number of Rows	2

### Electrical Characteristics

Dielectric Withstanding Voltage (Max)	500 Vrms
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### Body Features

Connector Profile	High
Primary Product Color	Black

### Contact Features

PCB Contact Termination Area Plating Material Thickness	4 – 6 $\mu\text{m}$ [157.48 – 236.22 $\mu\text{in}$ ]
Contact Shape & Form	Rectangular
Contact Layout	Matrix
Contact Mating Area Length	4 mm[.157 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)	1.7 A

### Termination Features

Termination Method to PCB	Surface Mount
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### Mechanical Attachment

Mounting Alignment Feature Length	.75 mm[.029 in]
Mating Alignment Type	Polarization
PCB Mount Retention Type	Location Peg
PCB Mount Alignment Type	Locating Posts
PCB Mount Retention	With
PCB Mount Alignment	With
Connector Mounting Type	Board Mount
Mating Alignment	With

### Housing Features

Mating Entry Location	Top
Housing Material	LCP



Centerline (Pitch)	1.27 mm[.05 in]
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### Dimensions

Row-to-Row Spacing	1.27 mm[.05 in]
Stack Height	4.85 mm[.191 in]
Connector Width	7.2 mm[.283 in]
Connector Height	9.85 mm[.388 in]
Profile Height from PCB	9.85 mm[.388 in]
Connector Length	17.78 mm[.7 in]

### Usage Conditions

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

### Operation/Application

Shielded	No
Circuit Application	Power & Signal

### Industry Standards

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

### Packaging Features

Packaging Reel Diameter	330 mm[12.99 in]
Packaging Quantity	250
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: JUNE 2024 (241) 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 # 354056-E  
SMCB 20 F AB VV 7-13 CL \* H007 137 E002



TE Part # 354063-E  
SMCB 20 F AB VV 7-03 CL \* H007 137 E002



TE Part # 354071-E  
SMCB 20 F AB VV 7-23 CL \* H007 137 E002



TE Part # 354079-E  
SMCQ 20 F AB VV 7-03 CL \* 0007 137 E002




TE Part # 294814-E  
SMCB 20 F AB VV 6-01 VH \* 0008 137 E002

## Also in the Series | ERNI SMC




Board-In Connectors(6)



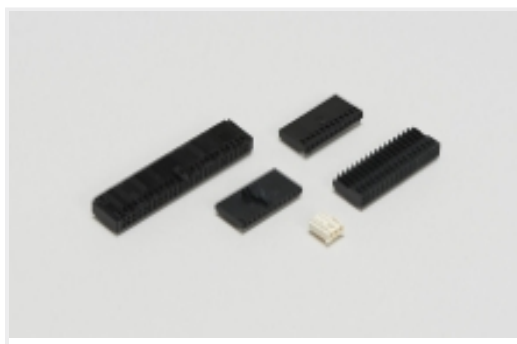
Connector Adapters & Connector Savers(45)



PCB Headers & Receptacles(81)



Pluggable I/O Cable Assemblies(27)



Wire-to-Board Connector Assemblies  
& Housings(5)

## Customers Also Bought



TE Part #406732-2  
MJ,10MM,8P,SHLD,NO HSG POST,SN



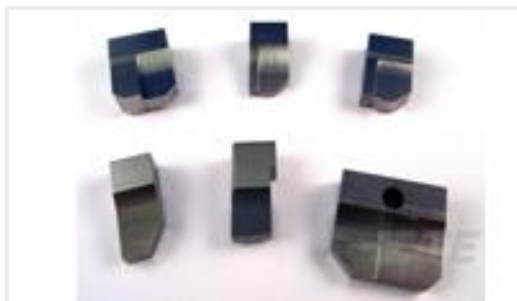
TE Part #1-794610-2  
MICRO MNL RPT CNT,LS PC 30AU L



TE Part #1445022-2  
MICRO MNL RECEPT HSG SINGLE R



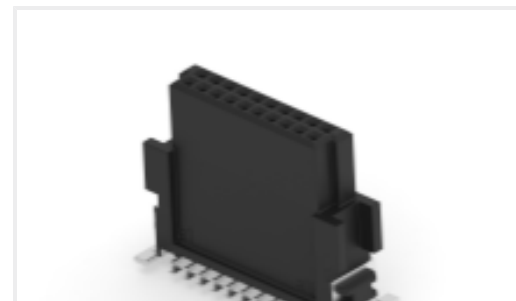
TE Part #1-968857-2  
AMP MCP, RECEPTACLE AND TAB



TE Part #4-240655-3  
ANVIL



TE Part #225457-E  
M12 FEMALE, A CODE,RA, 5P THR  
REAR MOUNT



TE Part #354071-E  
SMCB 20 F AB W 7-23 CL \* H007 137  
E002



TE Part #928782-2  
SOLDER CONTACT 17-13 0.6MM  
TPBR



TE Part #453804-2  
CRIMPER, WIRE-.090 WIDE F

## Documents

### Product Drawings

[SMCQ 20 M AB W 8-23 CL \\* H007 137 E005](#)

English

[SMCQ 20 M AB W 8-23 CL \\* H007 137 E005](#)

German

### CAD Files

Customer View Model

[ENG\\_CVM\\_CVM\\_254415-E\\_1.3d\\_igs.zip](#)



English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_254415-E\\_1.3d\\_stp.zip](#)

English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_254415-E\\_1.2d\\_dxf.zip](#)

English

**3D PDF**

3D

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

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### Datasheets & Catalog Pages

[Datasheet - ERNI SMC 1.27mm Connectors](#)

German

[Datasheet - ERNI SMC 1.27mm Connectors](#)

[Datasheet - ERNI SMC 1.27mm Connectors](#)

English

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### Product Specifications

[SMC\\_Receptacle\\_with\\_Ribbon\\_Cable\\_IDC\\_and\\_Header](#)

English