254537-E ✔ ACTIVE

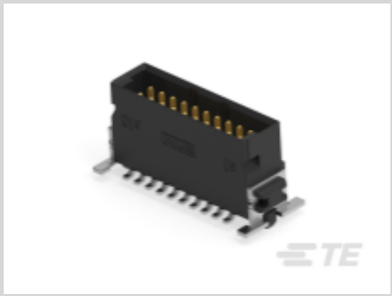
ERNI | ERNI SMC

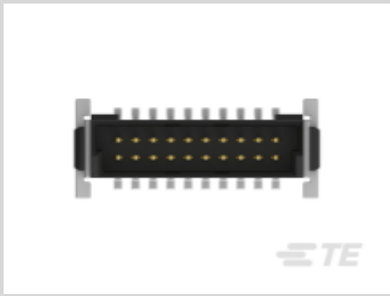
TE Internal #: 254537-E

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





PCB Connector Type: **PCB Mount Header**

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

Number of Positions: **20**

Number of Rows: **2**

Centerline (Pitch): **1.27 mm [.05 in]**

Features

Product Type Features

Connector Shape	Rectangular
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	10
Number of Loaded Positions	20
Stacking Configuration	Stack Through
Connector Contact Load Condition	Fully Loaded
Stackable	Yes
Number of Positions	20
Number of Rows	2

PCB Mount Orientation	Vertical
Board-to-Board Configuration	Parallel

Electrical Characteristics

Dielectric Withstanding Voltage (Max)	500 Vrms

Body Features

Connector Profile	Standard
Primary Product Color	Black

Contact Features

Contact Shape & Form	Rectangular
PCB Contact Termination Area Plating Material Thickness	4 – 6 µm[157.48 – 236.22 µin]
Contact Layout	Matrix
Contact Mating Area Length	4 mm[.157 in]
Contact Base Material	Copper Alloy
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Pin
Contact Current Rating (Max)	1.7 A
PCB Contact Termination Area Plating Material	Tin

Termination Features

Termination Method to PCB	Surface Mount

Mechanical Attachment

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

Housing Features

Mating Entry Location	Top
Centerline (Pitch)	1.27 mm[.05 in]
Housing Material	Liquid Crystal Polymer (LCP)

Dimensions

Connector Width	7.2 mm[.283 in]
Connector Height	8.25 mm[.325 in]
Profile Height from PCB	8.25 mm[.325 in]
Connector Length	17.78 mm[.7 in]
Row-to-Row Spacing	1.27 mm[.05 in]
Stack Height	3.25 mm[.128 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	280
Packaging Method	Tape & Reel

Product Compliance

For compliance documentation, visit the product page on TE.com>

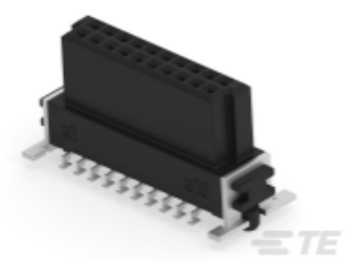
EU RoHS Directive 2011/65/EU	Compliant
EU ELV Directive 2000/53/EC	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	有害物质含量符合标准要求 No Restricted Substance(s) Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2025 (250) Candidate List Declared Against: JUNE 2025 (250) 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

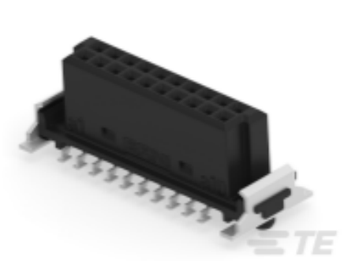
Product Compliance Disclaimer

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



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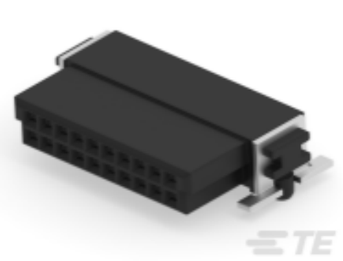
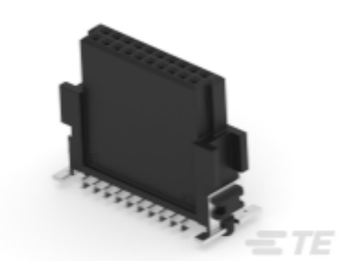
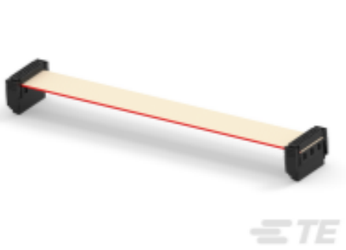


TE Part # 354079-E
SMCQ 20 F AB VV 7-03 CL * 0007 137 E002



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

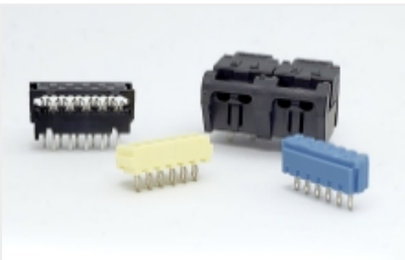
TE Part # 294814-E
SMCB 20 F AB VV 6-01 VH * 0008 137 E002



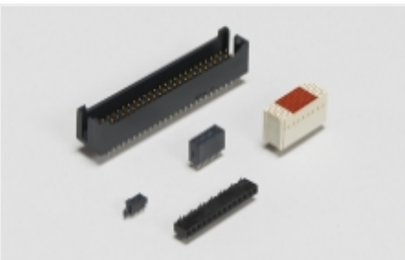
TE Part # 168312-E
IDCCS SMC 1,27 20 * AU AUI 100 PVC

TE Part # 168315-E
IDCCS SMC 1,27 20 * AU AUI 300 PVC

Also in the Series | ERNI SMC



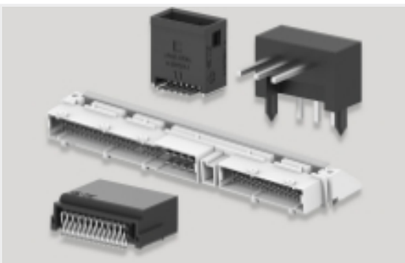
Board-In Connectors(6)



Board-to-Board Headers & Receptacles(79)

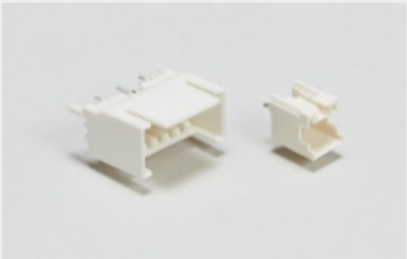
Connector Adapters & Connector Savers(41)

High Speed I/O Cable Assemblies(27)



PCB Headers & Receptacles(79)

Rectangular Power Connectors(84)



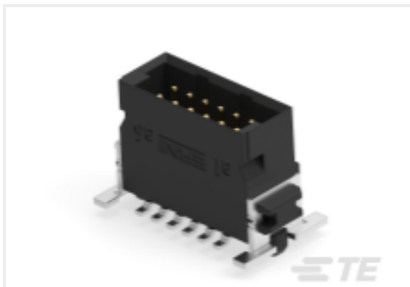
Wire-to-Board Headers & Receptacles (3)

Customers Also Bought

TE Part #515807-E
MCBA 12 M * SMD 137 * 176 * GURT C6 J 2

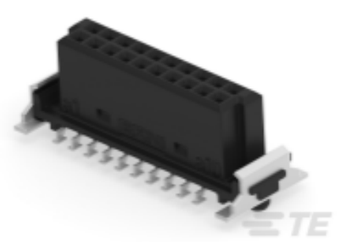
TE Part #515094-E
MCBA 8 M * SMD 137 * 176 * GURT C4 J 2 5

TE Part #800772-SF
FN286B-4-06

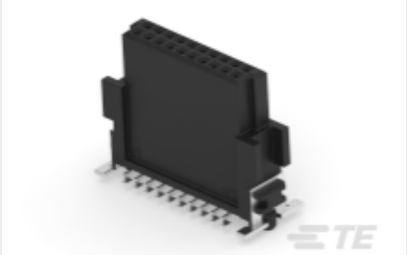


TE Part #244854-E
SMCQ 12 M AB VV 8-03 CL * H007 137 E005

TE Part #254538-E
SMCQ 32 M AB VV 8-03 CL * H007 137 E005



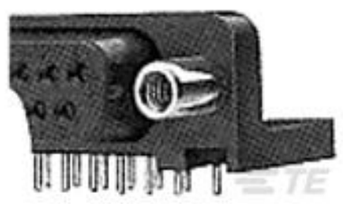
TE Part #354056-E
SMCB 20 F AB VV 7-13 CL * H007 137 E002



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

TE Part #5104340-1
A/L LOW PRO HDR 10P RA HT

TE Part #5227677-1
BNC PCB RT ANG JACK W/POST



TE Part #5788803-1
HD-20 RCPT 9P RA FFSCRLK HT

Documents

Product Drawings

SMCQ 20 M AB VV 8-03 CL * H007 137 E005

German

CAD Files

Customer View Model

ENG_CVM_CVM_254537-E_1.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_254537-E_1.3d_stp.zip

English

Customer View Model

ENG_CVM_CVM_254537-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.

Datasheets & Catalog Pages

Datasheet - ERNI SMC 1.27mm Connectors

English

Datasheet - ERNI SMC 1.27mm Connectors

Datasheet - ERNI SMC 1.27mm Connectors

German

Product Specifications

SMC_Receptacle_with_Ribbon_Cable_IDC_and_Header

English