



Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Receptacle**

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

Configuration Features

Number of Columns	10
Number of Loaded Positions	20
Connector Contact Load Condition	Fully Loaded
Stackable	No
Number of Positions	20
Number of Rows	2



PCB Mount Orientation	Right Angle
Board-to-Board Configuration	Co-Planar, Orthogonal

Electrical Characteristics

Dielectric Withstanding Voltage (Max)	500 Vrms
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Body Features

Connector Profile	Standard
Primary Product Color	Black

Contact Features

PCB Contact Termination Area Plating Material Thickness	4 – 6 μm[157.48 – 236.22 μin]
Contact Shape & Form	Dual Beam
Contact Layout	Matrix
Contact Base Material	Copper Alloy
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Receptacle
Contact Current Rating (Max)	1.7 A
PCB Contact Termination Area Plating Material	Tin

Termination Features

Termination Method to PCB	Surface Mount
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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	Side
Centerline (Pitch)	1.27 mm[.05 in]
Housing Material	Liquid Crystal Polymer (LCP)

Dimensions



Connector Width	9.6 mm[.378 in]
Connector Height	3.85 mm[.151 in]
Connector Length	17.78 mm[.7 in]
Profile Height from PCB	3.85 mm[.151 in]
Row-to-Row Spacing	1.27 mm[.05 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	560
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 Bromine/Chlorine - Br and Cl < 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 # 494399-E
SMCB 20 M AB VV 7-03 CL * 0007 107 E003

TE Part # 254588-E
SMCQ 20 M AB VV 8-13 CL * H007 137 E005

TE Part # 254537-E
SMCQ 20 M AB VV 8-03 CL * H007 137 E005

TE Part # 354081-E
SMCQ 40 F AB VV 7-03 CL * 0007 137 E002

TE Part # 494075-E
SMCB 20 M AB VV 7-03 CL * 0007 137 E004

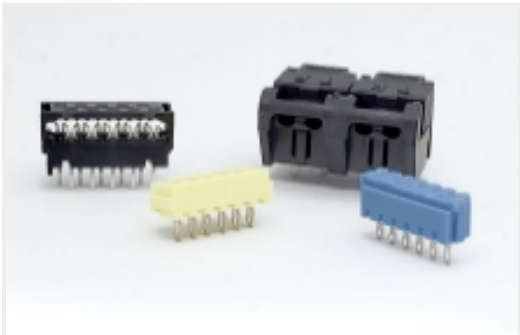
TE Part # 454990-E
SMCQ 20 M AB VV 8-13 CL * H007 137 E005

TE Part # 254415-E
SMCQ 20 M AB VV 8-23 CL * H007 137 E005

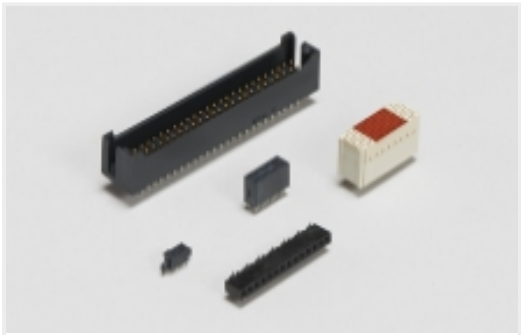
TE Part # 354080-E
SMCQ 32 F AB VV 7-03 CL * 0007 137 E002

TE Part # 354095-E
SMCB 20 M AB VV 7-03 CL * 0007 137 E004

Also in the Series | ERNI SMC



Board-In Connectors(6)



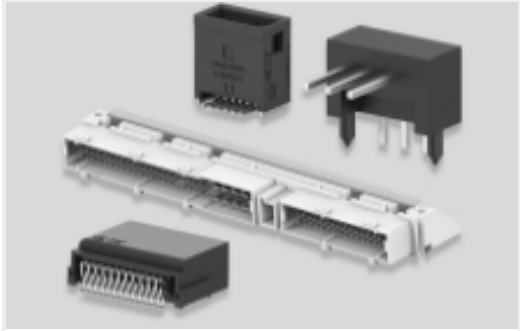
Board-to-Board Headers & Receptacles(79)



Connector Adapters & Connector Savers(41)



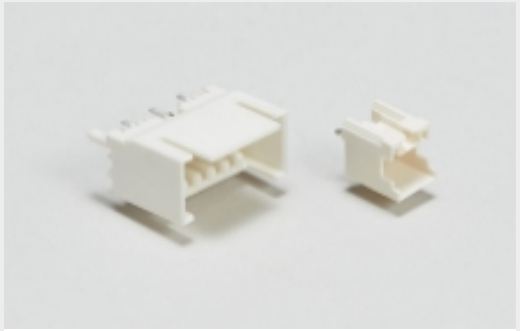
High Speed I/O Cable Assemblies(27)



PCB Headers & Receptacles(79)



Rectangular Power Connectors(84)



Wire-to-Board Headers & Receptacles (3)

Customers Also Bought



TE Part #354080-E
SMCQ 32 F AB VV 7-03 CL * 0007 137 E002



TE Part #354095-E
SMCB 20 M AB VV 7-03 CL * 0007 137 E004



TE Part #801239-SF
FN332Z-6-05



TE Part #354097-E
SMCB 40 M AB VV 7-03 CL * 0007 137 E004



TE Part #154764-E
SMCB 26 M AB VV 7-03 CL * 0007 137 E004



TE Part #204632-E
SMCB 40 F AB VV 7-13 CL * H007 137 E002



TE Part #254588-E
SMCQ 20 M AB VV 8-13 CL * H007 137 E005



TE Part #T4132012081-000
M12,FRONT MOUNT,MALE, A,8P, SOLDER WIRE



TE Part #1721260-6
OJ-SS-124LMH2



TE Part #6600150-1
MBXL R/A HDR DB 4P+24S

Documents



Product Drawings

SMCQ 20 F AB W 7-03 CL * 0007 137 E002

English

CAD Files

Customer View Model

ENG_CVM_CVM_354079-E_1.3d_stp.zip

English

Customer View Model

ENG_CVM_CVM_354079-E_1.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_354079-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 SMC 1.27mm Connectors

English

Datasheet - ERNI SMC 1.27mm Connectors

Datasheet - ERNI SMC 1.27mm Connectors

German