



Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Receptacle**

PCB Mount Orientation: **Right Angle**

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

Number of Positions: **20**

Number of Rows: **2**

Features

Product Type Features

Connector Shape	Rectangular
PCB Connector Assembly Type	PCB Mount Receptacle
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
Stackable	No
Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Right Angle
Number of Positions	20
Number of Rows	2



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 Layout	Matrix
Contact Shape & Form	Dual Beam
PCB Contact Termination Area Plating Material	Tin
Contact Base Material	Copper Alloy
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Receptacle
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]
PCB Mount Alignment Type	Locating Posts
PCB Mount Retention Type	Location Peg
Mating Alignment	With
Mating Alignment Type	Polarization
PCB Mount Retention	With
PCB Mount Alignment	With
Connector Mounting Type	Board Mount

Housing Features

Mating Entry Location	Side
Centerline (Pitch)	1.27 mm[.05 in]
Housing Material	LCP

Dimensions

Connector Length	17.78 mm[.7 in]
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Connector Height	3.85 mm[.151 in]
Connector Width	9.6 mm[.378 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
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	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	No Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2024 (241) Candidate List Declared Against: JAN 2024 (240) 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 # 254415-E
SMCQ 20 M AB VV 8-23 CL * H007 137 E005

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

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

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

TE Part # 354081-E
SMCQ 40 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 # 454990-E
SMCQ 20 M AB VV 8-13 CL * H007 137 E005

TE Part # 494399-E
SMCB 20 M AB VV 7-03 CL * 0007 107 E003

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

Also in the Series | ERNI SMC

A collection of various board-in connectors, including black, yellow, and blue components with different pin configurations.

Board-In Connectors(6)

A variety of connector adapters and savers, including gold-plated and silver components in different shapes and sizes.

Connector Adapters & Connector Savers(45)

A selection of PCB headers and receptacles, including black and white components with various pin counts and configurations.

PCB Headers & Receptacles(81)

A set of pluggable I/O cable assemblies, featuring black cables with different connector types at each end.

Pluggable I/O Cable Assemblies(27)

A collection of wire-to-board connector assemblies and housings, including black and gold components.

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

Customers Also Bought

A 3D model of a DWDM cage assembly, showing a rectangular housing with multiple pins.

TE Part #2227316-1
DWDM Cage Assembly, 11 PF

A 3D model of a SMF3 component, showing a small black rectangular part.

TE Part #2-1879022-5
SMF3 3K3 5%

A 3D model of a 3650 component, showing a small black rectangular part.

TE Part #5-1624113-7
3650 0805 0.33uH 5% 2K RL

A 3D model of a RCPT ASSY component, showing a circular housing with a grid of pins.

TE Part #1-207825-5
RCPT ASSY,POSTED,SER 1,SZ 11-4

A 3D model of a 2X5 SFP+ component, showing a rectangular housing with multiple pins.

TE Part #2132403-5
2X5 SFP+ w/ Springs, 4 LP Sn

A 3D model of a 03P MTA-100 HDR ASSY component, showing a blue component with three pins.

TE Part #3-647106-3
03P MTA-100 HDR ASSY,SM,SN

A 3D model of a MICT component, showing a long, thin component with many pins.

TE Part #1-5767007-1
MICT,260PLUG,152,ASSY,.025,REC

A 3D model of a SMCB component, showing a black component with multiple pins.

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

A 3D model of a MBXL component, showing a black component with multiple pins.

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

German