

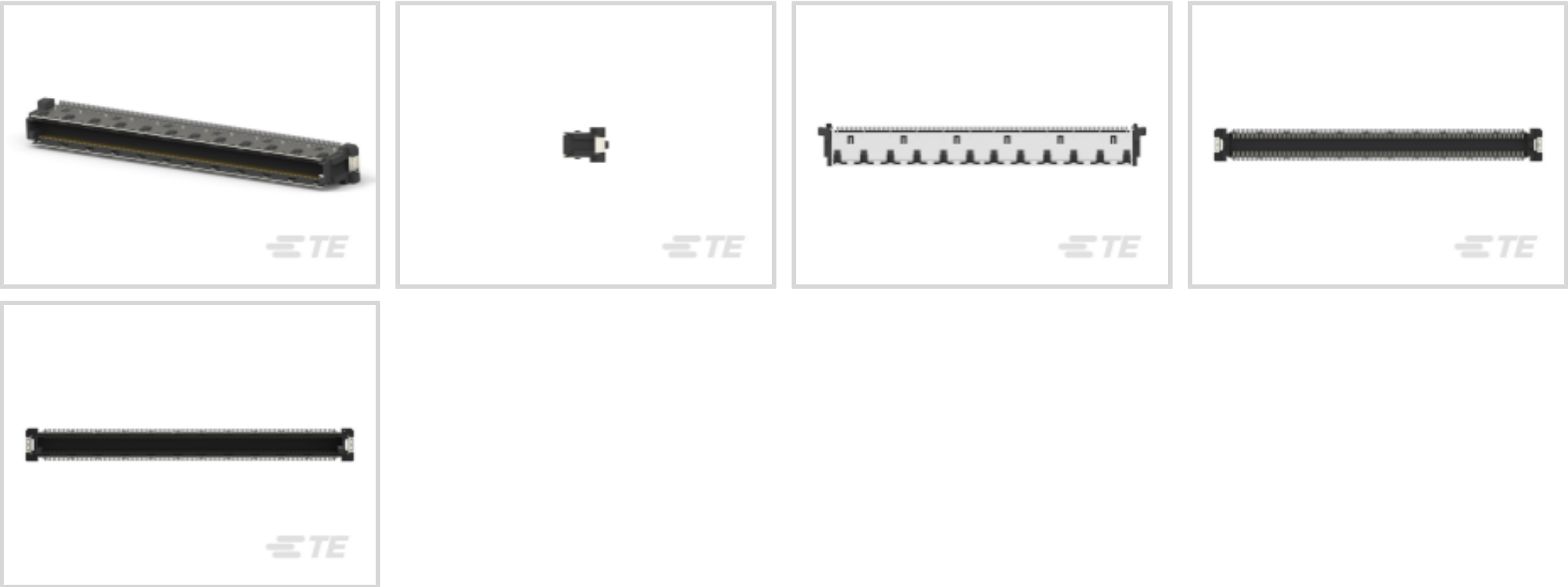


Free Height

TE Internal #: 3-6318491-6
PCB Mount Header, Vertical, Board-to-Board, 220 Position, .5 mm [.02 in] Centerline, Gold (Au), Surface Mount, Signal, Black, Tray, Free Height

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Header**
PCB Mount Orientation: **Vertical**
Connector System: **Board-to-Board**
Number of Positions: **220**
Centerline (Pitch): **.5 mm [.02 in]**

Features

Product Type Features

Ground Feature Type	Grounding Contact, Grounding Plate
PCB Connector Type	PCB Mount Header
Connector System	Board-to-Board
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

Configuration Features

Board-to-Board Configuration	Parallel
Stackable	Yes
PCB Mount Orientation	Vertical
Number of Positions	220

Electrical Characteristics

Operating Voltage	50 VAC
Insulation Resistance	2 MΩ
Dielectric Withstanding Voltage (Max)	200 VAC



Body Features

Primary Product Color	Black
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Contact Features

Contact Mating Area Plating Material Thickness	.2 µm[8 µin]
PCB Contact Termination Area Plating Material Thickness	1 µm[39.37 µin]
Contact Layout	Inline
Contact Mating Area Length	1 mm, 1.3 mm
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)	.5 A

Termination Features

Rectangular Termination Post & Tail Width	.71 mm[.028 in]
Rectangular Termination Post & Tail Thickness	.2 mm[.008 in]
Termination Method to PCB	Surface Mount

Mechanical Attachment

Mating Alignment Type	Polarization
PCB Mount Retention Type	Solder 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

Housing Material	High Temperature Thermoplastic
Centerline (Pitch)	.5 mm[.02 in]

Dimensions

Stack Height	8 mm[.315 in]
Connector Height	7.45 mm[.293 in]

Usage Conditions

Housing Temperature Rating	High
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Operating Temperature Range

-40 – 85 °C[-40 – 185 °F]

Operation/Application

Circuit Application	Signal
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Industry Standards

UL Flammability Rating	UL 94V-0
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Packaging Features

Packaging Quantity	30
Packaging Method	Tray

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: JAN 2025 (247) Candidate List Declared Against: JAN 2025 (247) Does not contain REACH SVHC
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Reflow solder capable to 245°C

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 # 4-1827253-6
[.5FHP05H,220,S,GIG,08/Sn,TR,NSYes](#)

TE Part # 3-2040714-6
[.5FHR04H,220,S,GIG,30/Sn,TR,NSYes](#)

TE Part # 3-6318490-6
[.5FHR04H,220,S,GIG,08/Sn,HT,NSYes](#)

TE Part # 3-1939756-6
[.5FHP08H,220,S,GIG,30/Sn,HT,NS](#)

TE Part # 3-1939755-6
[.5FHR04H,220,S,GIG,30/Sn,HT,NS](#)

TE Part # 9-6318491-6
[.5FHP08H,220,S,GIG,08/Sn,HT,NSYes, W/C](#)

TE Part # 9-1827253-6
[.5FHP05H,220,S,GIG,30/Sn,HT,NSYes](#)

TE Part # 3-1827253-6
[.5FHP05H,220,S,GIG,08/Sn,HT,NSYes](#)

TE Part # 6-5353606-6
[.5FHR04H,220,S,GIG,08/Sn,HT,SEYes](#)

TE Part # 8-6318491-6
[.5FHP08H,220,S,GIG,08/Sn,HT,SEYes](#)

TE Part # 353594-3
[0.5 FH BTB PLUG CONT](#)

TE Part # 9-1939756-6
[.5FHP08H,220,S,GIG,30/Sn,HT,NS,WC](#)

TE Part # 3-2040713-6
[.5FHP08H,220,S,GIG,30/Sn,TR,NS](#)

TE Part # 9-1827231-6
[.5FHR04H,440,B,GIG,30/Sn,HT,NS](#)

Also in the Series | [Free Height](#)

[Board-to-Board Headers & Receptacles\(747\)](#)

[PCB Headers & Receptacles\(747\)](#)

Customers Also Bought



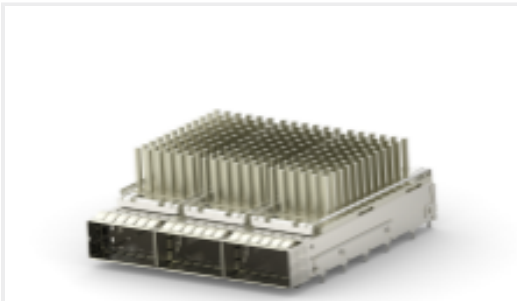
TE Part #2170704-7
CAGE ASSY, QSFP28 1X1, SPRING, HS



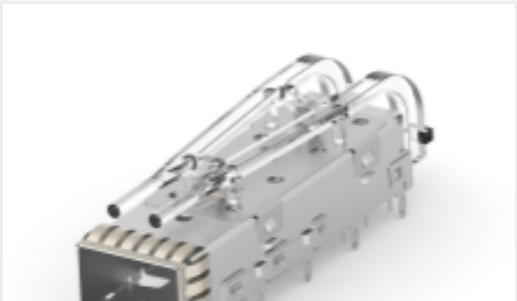
TE Part #2304921-1
ZSFP+ 1X8 CAGE ASSEMBLY, PRESS-FIT



TE Part #2358709-1
250 FASTON, TAB, TAPING AND REEL ASSY



TE Part #2170738-3
QSFP28, 1X3, CAGE ASSEMBLY, SPRING, HS



TE Part #2291672-1
SFP+ 1X1 CAGE ASSEMBLY, LIGHT PIPE



TE Part #6450874-1
MBXLE R/A RCPT, A/C PASS THRU 4ACP+12S+3P



TE Part #2176157-9
TLM 2010 0.75W R047 5% 100PPM 4K RL



TE Part #1473006-1
SEMI HARD TRAY DDR SOCKET 200P RL



TE Part #5145154-8
STANDARD EDGE .050 SERIES 60 DUAL ASSY



TE Part #2357739-3
16G, 05FH, REC, 220P, 4H, emboss w/ cap

Documents

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_3-6318491-6_C1.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_3-6318491-6_C1.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_3-6318491-6_C1.3d_stp.zip

English

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

Datasheets & Catalog Pages

Fine Pitch Stacking Connectors - 0.5mm Free Height (FH) Connectors

English

COM Connectors Brochure (English)

English



Stacking Connectors Quick Reference Guide (English)

English

Product Specifications

Product Specification

English

0.5mm Pitch Board to Board Connector, Free Height Type

English

Agency Approvals

UL

English