

5177986-3 ✓ ACTIVE



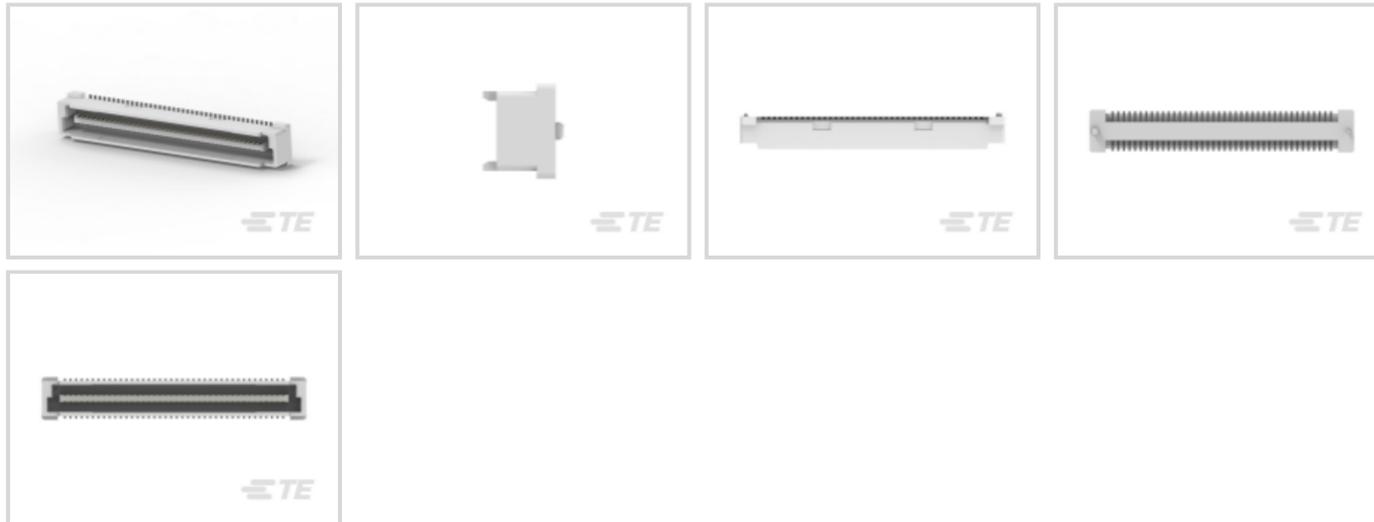
### Free Height

TE Internal #: 5177986-3

PCB Mount Header, Vertical, Board-to-Board, 80 Position, .8 mm [.031 in] Centerline, Fully Shrouded, Gold (Au), Surface Mount, Signal, Free Height

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles > Free Height Plug Connector: Board-Board, Vertical, 80, 0.8mm



PCB Connector Type: **PCB Mount Header**

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

Number of Positions: **80**

Centerline (Pitch): **.8 mm [.031 in]**

PCB Mount Orientation: **Vertical**

[All Free Height Plug Connector: Board-Board, Vertical, 80, 0.8mm \(18\)](#)

## Features

### Product Type Features

PCB Connector Type	PCB Mount Header
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

Stackable	Yes
Number of Positions	80
PCB Mount Orientation	Vertical
Board-to-Board Configuration	Parallel

### Electrical Characteristics



Operating Voltage	100 VAC
Insulation Resistance	2 MΩ
Dielectric Withstanding Voltage (Max)	500 VAC

### Body Features

Assembly Process Feature Material	Steel
Primary Product Color	Natural

### Contact Features

PCB Contact Termination Area Plating Material Finish	Matte
Mating Tab Width	.4 mm [.016 in]
PCB Contact Termination Area Plating Material Thickness	2 μm [78.74 μin]
Contact Layout	Inline
Contact Base Material	Brass
Mating Tab Thickness	.2 mm [.008 in]
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material Finish	Matte
Contact Mating Area Plating Material Thickness	.2 μm [8 μin]
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Tab
Contact Current Rating (Max)	.5 A

### Termination Features

Rectangular Termination Post & Tail Width	.25 mm [.01 in]
Rectangular Termination Post & Tail Thickness	.2 mm [.008 in]
Termination Method to PCB	Surface Mount

### Mechanical Attachment

Mounting Alignment Feature Length	.5 mm [.02 in]
PCB Mount Alignment Type	Positioning Bosses
Mating Alignment Type	Polarization
Connector Mounting Type	Board Mount
Mating Alignment	With
PCB Mount Alignment	With
PCB Mount Retention	Without

### Housing Features

--	--



Mating Entry Location	Top
Centerline (Pitch)	.8 mm [.031 in]
Housing Material	Matte

### Dimensions

Connector Height	5 mm [.197 in]
Stack Height	5 mm, 9 mm, 13 mm, 17 mm [.197 in] [.354 in] [.512 in] [.669 in]

### Usage Conditions

Housing Temperature Rating	High
Operating Temperature Range	-40 – 125 °C [-40 – 257 °F]

### Operation/Application

Assembly Process Feature	Pick and Place Cover
Circuit Application	Signal

### Industry Standards

UL Flammability Rating	UL 94V-0
------------------------	----------

### Packaging Features

	.5 in
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 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	Reflow solder capable to 260°C

Product Compliance Disclaimer

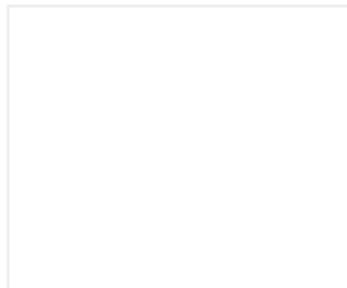


This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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

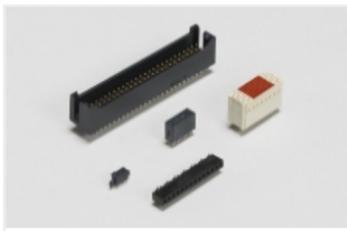


TE Part # CAT-313-RCB80  
Free Height Receptacle Conn: Board-Board, Vertical, 80, 0.8mm

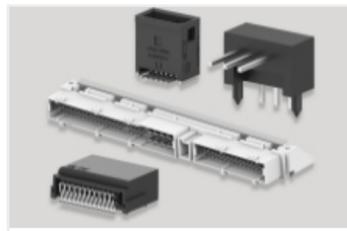


TE Part # 5-5179180-7  
0.8FH,R09H.5,080,08/SN,TR,SC

## Also in the Series | Free Height



Board-to-Board Headers & Receptacles(739)



PCB Headers & Receptacles(739)

## Customers Also Bought



TE Part #254897-E  
STVC 96 F ABC VV 7-00 TL 4,0 \* 137 E007



TE Part #292207-2  
MINI CT SGL DIP V 2P NAT



TE Part #1759547-1  
mSATA/mini PCI-E 7H G/F



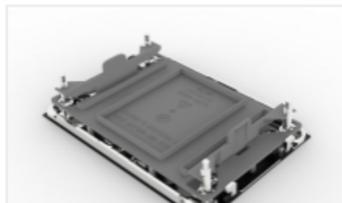
TE Part #8-1879140-5  
RN 0603 140K 0.1% 10PPM 5K RL



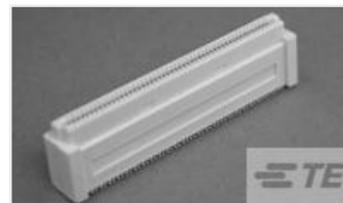
TE Part #3-2176070-5  
3521 270R 1% 2W



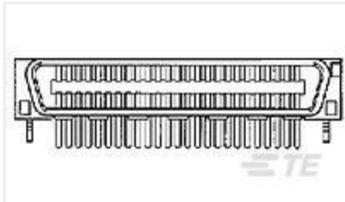
TE Part #2327677-3  
RECEPT ASSY, 140 POS, VERT, SLIVER 2.0



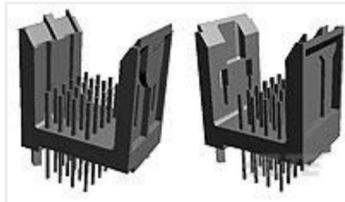
TE Part #2-2330550-2  
SOCKET P4 BOLSTER PLATE ASSY, W/ COVER



TE Part #5084616-1  
0.8FH,R13H.5,040,08/Sn,TR,SC



TE Part #5175610-3  
CHAMP 050 BTB PLUG H 30P



TE Part #5536501-3  
2MM FB,ASY,96,SIG,HDR,SL,4.25

## Documents

### CAD Files

#### 3D PDF

3D

#### Customer View Model

[ENG\\_CVM\\_CVM\\_5177986-3\\_D.2d\\_dxf.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_5177986-3\\_D.3d\\_igs.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_5177986-3\\_D.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 - 0.8mm Free Height \(FH\) Connectors](#)

English

### Product Specifications

[Product Specification](#)

English

[Product Specification](#)

English

### Agency Approvals

[UL](#)

English

5177986-3

PCB Mount Header, Vertical, Board-to-Board, 80 Position, .8 mm [.031 in] Centerline,  
Fully Shrouded, Gold (Au), Surface Mount, Signal, Free Height

