

2198174-1 ✓ ACTIVE

STRADA | STRADA Whisper 3.9mm

TE Internal #: 2198174-1

High Speed Backplane Connectors, Board-to-Board, 144 Position,
Mating Alignment, Keyed Mating Alignment Type, 6 Row, 12
Column, STRADA Whisper 3.9mm

[View on TE.com >](#)



[Connectors](#) > [PCB Connectors](#) > [Backplane Connectors](#) > [High Speed Connectors](#)



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

Number of Positions: **144**

Row-to-Row Spacing: **3.9 mm [.154 in]**

Mating Alignment: **With**

Mating Alignment Type: **Keyed**

Features

Product Type Features

Signal Arrangement	Differential
Connector System	Board-to-Board
PCB Connector Assembly Type	PCB Mount Receptacle
Shroud Style	Unshrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

Configuration Features

Pairs per Column	6
Number of Ground Positions	84
Number of Pairs	72
Stackable	No
Number of Signal Positions	144
Number of Positions	144
Number of Rows	6
Number of Columns	12
Backplane Architecture	Orthogonal, Traditional Backplane
PCB Mount Orientation	Right Angle



Electrical Characteristics

UL Voltage Rating	80 VAC
Impedance	100 Ω
Operating Voltage	80 VAC

Signal Characteristics

Differential Impedance	100 Ω
Number of Differential Pairs per Column	8
Data Rate	56 Gb/s

Body Features

Shield Material	Copper Alloy
-----------------	--------------

Contact Features

Contact Type	Receptacle
Contact Mating Area Plating Material	Gold Flash
Contact Shape & Form	Dual Beam
Contact Underplating Material	Palladium Nickel
PCB Contact Termination Area Plating Material	Tin
Contact Base Material	Copper Alloy
Contact Current Rating (Max)	.4 A

Termination Features

Termination Method to Printed Circuit Board	Through Hole - Press-Fit
---	--------------------------

Mechanical Attachment

Mating Retention	Without
Guide Hardware	Without
PCB Mount Retention	With
PCB Mount Retention Type	Action/Compliant Tail
Mating Alignment	With
Mating Alignment Type	Keyed

Housing Features

Number of Shrouded Sides	0
Housing Material	LCP (Liquid Crystal Polymer)
Housing Color	Black
Centerline (Pitch)	2.5 mm[.098 in]



Dimensions

Connector Length	34.05 mm[1.341 in]
Connector Height	26.5 mm[1.043 in]
PCB Thickness (Recommended)	1 mm[.039 in]
PCB Hole Diameter	1 mm[.039 in]
Row-to-Row Spacing	3.9 mm[.154 in]

Usage Conditions

Operating Temperature Range	-55 – 105 °C[-67 – 221 °F]
-----------------------------	----------------------------

Operation/Application

Durability Rating	200 Cycles
Circuit Application	Signal

Industry Standards

UL File Number	E28476
Agency/Standard	UL
UL Flammability Rating	UL 94V-0

Packaging Features

Packaging Method	Tube
------------------	------

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 2022 (224) Candidate List Declared Against: JAN 2021 (211) Does not contain REACH SVHC
Halogen Content	BFR/CFR/PVC Free, but Br/Cl >900 ppm in other sources.
Solder Process Capability	Not reviewed for solder process capability

Product Compliance Disclaimer

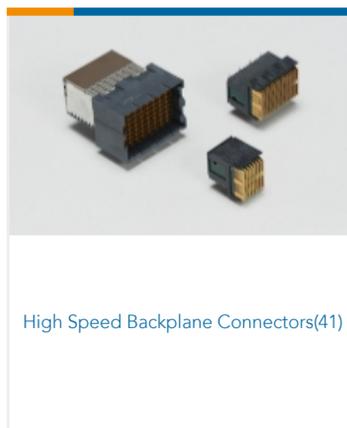
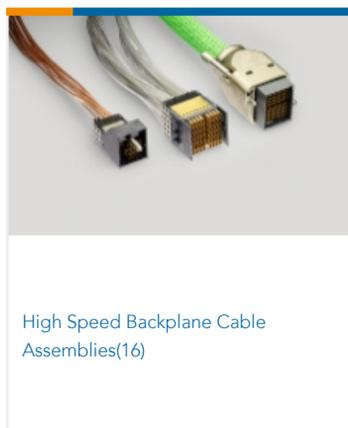
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight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



Also in the Series | STRADA Whisper 3.9mm



Documents

Product Drawings

[SWO, Recep Assy, 6P12C, 30PdNi, Sn](#)

English

CAD Files

[3D PDF](#)

[3D](#)

[Customer View Model](#)

[ENG_CVM_CVM_2198174-1_A.2d_dxf.zip](#)

English

[Customer View Model](#)

[ENG_CVM_CVM_2198174-1_A.3d_igs.zip](#)

English

[Customer View Model](#)

[ENG_CVM_CVM_2198174-1_A.3d_stp.zip](#)



English

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

Datasheets & Catalog Pages

[STRADA Whisper 3.9mm Pair-In-Column\(PiC\) 100 Ohm Connector Routing Guide](#)

English

Product Specifications

[Application Specification](#)

English

Product Environmental Compliance

[MD_2198174-1_10192017247_dmtec](#)

English

[MD_2198174-1_10192017247_dmtec](#)

English