

1-2177370-3 ✓ ACTIVE

### Nano MQS

TE Internal #: 1-2177370-3

PCB Mount Header, Horizontal, Wire-to-Board, 12 Position, 1.8 mm  
[.071 in] Centerline, Fully Shrouded, Tin, Through Hole - Solder,  
Signal, Nano MQS

[View on TE.com >](#)



Connectors > PCB Connectors > PCB Headers & Receptacles > Miniature Automotive I/O Headers



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

Number of Positions: **12**

Centerline (Pitch): **1.8 mm [ .071 in ]**

Sealable: **No**

PCB Mount Orientation: **Horizontal**

[All Miniature Automotive I/O Headers \(38\)](#)

## Features

### Product Type Features

Mixed & Hybrid Header	No
Connector Shape	Rectangular
PCB Connector Assembly Type	PCB Mount Header
Header Type	Fully Shrouded
Connector System	Wire-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

### Configuration Features

Number of Sections	1
Number of Signal Positions	12
Number of Positions	12
PCB Mount Orientation	Horizontal
Number of Rows	2



### Electrical Characteristics

Nominal Voltage Architecture	12 V
Operating Voltage	12 VDC

### Body Features

Primary Product Color	Black
Connector & Keying Code	B

### Contact Features

Contact Size	.5mm
Contact Type	Tab
Mating Tab Width	.5 mm[.02 in]
Mating Tab Thickness	.4 mm[.016 in]
Contact Mating Area Plating Material	Tin

### Termination Features

Termination Method to Printed Circuit Board	Through Hole - Solder
---	-----------------------

### Mechanical Attachment

Mounting Holes	Without
Mating Retention	With
Mating Alignment	With
PCB Mount Alignment	With
Panel Mount Feature	Without
PCB Mount Retention	Without
Mating Retention Type	Locking Interface

### Housing Features

Centerline (Pitch)	1.8 mm[.071 in]
--------------------	-----------------

### Dimensions

Connector Length	20.05 mm[.789 in]
Connector Width	24.47 mm[.963 in]
PCB Thickness (Recommended)	.8 mm[.031 in]
Profile Height from PCB	12.6 mm[.496 in]

### Usage Conditions

Operating Temperature (Max)	65 °C, 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[149 °F][158 °F][167 °F][176 °F]
-----------------------------	--

[185 °F][194 °F][212 °F][221 °F][230 °F][248 °  
F]

Operating Temperature Range

-40 – 105 °C[-40 – 221 °F]

### Operation/Application

Shielded

No

Circuit Application

Signal

### Industry Standards

UL Flammability Rating

UL 94V-0

### Packaging Features

Packaging Method

Tray

### Other

Interface Number

114-20160

## 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

Low Halogen - Br, Cl, F, I < 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

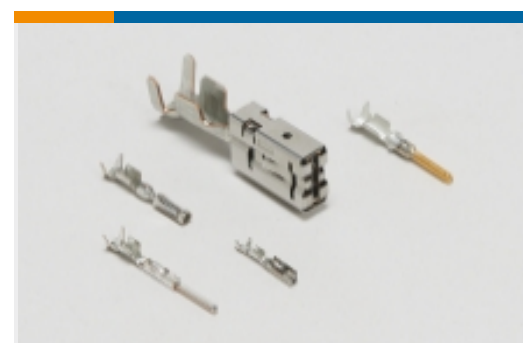


TE Part # 2177587-2  
12POS NANO MQS TL PLUG  
HOUSING, CODE B

## Also in the Series | Nano MQS



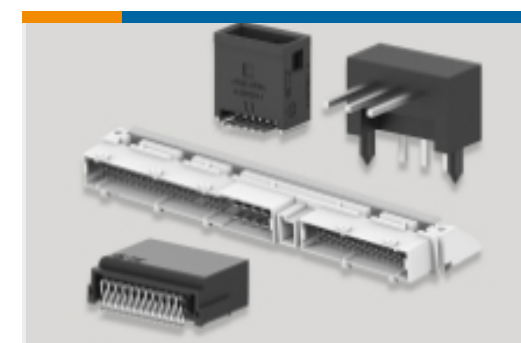
Automotive Housings(55)



Automotive Terminals(8)



Insertion & Extraction Tools(6)



PCB Headers & Receptacles(20)

## Customers Also Bought



TE Part #1-2176338-4  
CRGCC 0402 150R 5%



TE Part #1879351-6  
RR01 5% 4K7 AMMO



TE Part #2177367-3  
Miniature Automotive I/O Headers



TE Part #2-1703930-1  
NANOMQS, RECEPTACLE TERMINAL



TE Part #2177587-1  
12POS NANO MQS TL PLUG  
HOUSING, CODE A



TE Part #214547-E  
MSPPM 5 F SMD F6 \* A V 137 094 \*  
E008 J



TE Part #454302-E  
IDCTERM 1 IDC22 1,30 \* 105 707 0007  
J 2



TE Part #BAT-HLD-007-SMT-TR  
Holder 1216 1220 1225 SMT T&R Pack

## Documents

### Product Drawings

12POS,TAB 0.5X0.4,HEADER ASSY,CODB

English



### CAD Files

#### 3D PDF

3D

#### Customer View Model

[ENG\\_CVM\\_CVM\\_1-2177370-3\\_D.2d\\_dxf.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_1-2177370-3\\_D.3d\\_igs.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_1-2177370-3\\_D.3d\\_stp.zip](#)

English

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

### Product Specifications

#### Application Specification

English

#### Application Specification

English