

TH 025 CONNECTOR SERIES

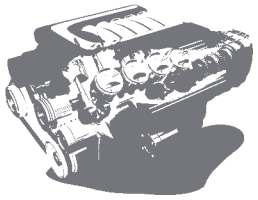
FOR THE AUTOMOTIVE INDUSTRY

SOLUTIONS FOR FUTURE MOBILITY

The pace at which the E&E architecture of vehicles is being innovated is one of the major challenges facing the automotive industry. An increasing number of electric and electronic systems enriches modern vehicles and makes them more attractive. At the same time, reliability is one the automotive industry's core strengths. Within this area of potential conflict, everything depends on constant innovation and proven technology. Is that a contradiction in terms? Not for us.

TE Transportation Solutions, which is part of TE Connectivity, is a company driven by technology. With this philosophy, we have become one of the world's largest manufacturers of passive components. It's part of our DNA to reconcile innovation and reliability. To do that, we have invested in the most modern R&D and testing infrastructure. We will show you how leading-edge passive components can contribute to vehicle function enrichment, better efficiency and greater comfort.

POWERTRAIN SYSTEMS



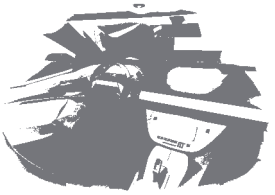
SAFETY & SECURITY SYSTEMS



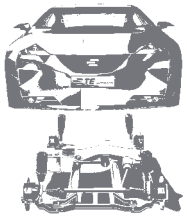
CONVENIENCE



DRIVER INFORMATION



BODY & CHASSIS SYSTEMS



TE AUTOMOTIVE ONLINE

The TE Transportation Solutions website is an innovative and interactive source for application information, product updates and technical solutions.

Please contact us at: www.te.com/automotive

STAY CONNECTED

TE AUTOMOTIVE OFFERS A VARIETY OF PRODUCT SPECIFIC CATALOGS, BROCHURES AND HIGH IMPACT FLYERS TO HELP BETTER SERVE YOU!



TE Literature

For more information on literature for TE Automotive, please contact your local organization or go to: **www.te.com/automotive**

TE Products

www.te.com/en/products/product-landing.html

Product Information Center (PIC)

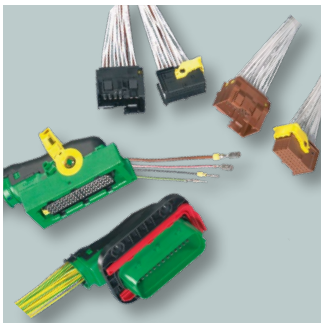
You can rely on TE Connectivity's PIC Team to provide you support for answers to your general information or technical questions in an efficient and effective manner.

To reach our PIC staff, please contact your local organization or see our Global Contacts page.

Please contact us at
www.te.com/support-center

INNOVATIVE TECHNOLOGIES

TE Automotive – a business segment of TE Connectivity – follows the globalization goals of our customers, speeds up the integration of new technologies and enables our customers access to our vast product portfolio and services.



Interconnection Systems

TE Connectivity‘s electrical and electronic interconnection products and solutions are used to electrically and mechanically join wires and cables, printed circuit boards, integrated circuit packages and batteries.



Cable Assemblies

TE Connectivity is your partner for vehicle-specific cable assemblies. We offer research and development capabilities, prototypes and samples, as well as manufacturing facilities for special cable assemblies.



Hybrid & Electric Mobility Solutions

Electric mobility is changing the way engineers think about vehicles. The way they’re designed and engineered. The way they’re fueled. Even the way the fuel is delivered. And we’re right there with you helping complete the connections for current and nextgeneration hybrid and electric mobility and the charging infrastructure. TE Connectivity’s complete porfolio of connection and protection systems includes battery connectivity systems, connectors, cable assemblies, high-voltage relays and contactors, power distribution units and customer-specific designs.





Sensor Solutions

TE Connectivity provides contactless and electromechanical sensor products with robust housing technologies, connection systems and temperature-resistant design for use in a variety of industrial and commercial transportation applications.



Relays

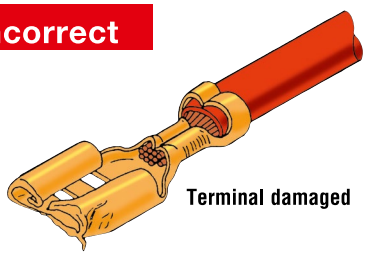
TE Connectivity‘s 24 V relay product line includes a broad range of robust and versatile relays for many diverse applications within trucks, buses, agricultural tractors, construction equipment and other heavy duty commercial vehicles. With increased contact gaps and other key design features, these relays are designed for use in challenging environments where they may regularly encounter extended periods of shock and vibration.



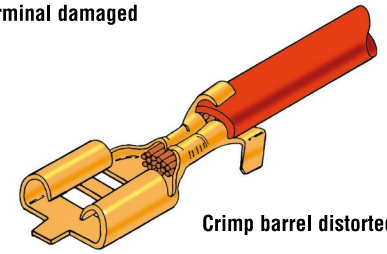
Infotainment

TE Connectivity offers a wide variety of infotainment solutions for consumer port connections, high data rate applications, next-generation harness architecture, board-to-board connections and vehicle-to-vehicle communication.

Incorrect



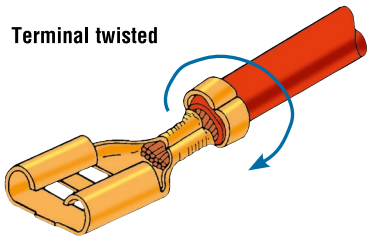
Terminal damaged

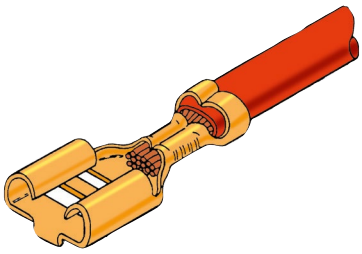


Cut off tab too long

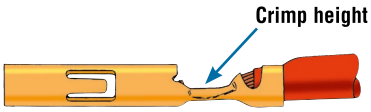
Crimp barrel distorted

Terminal twisted

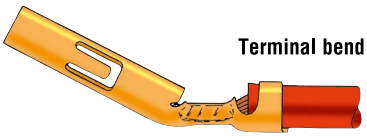




Cut off tab deformed

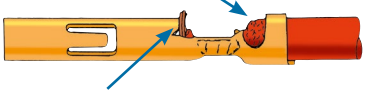


Crimp height too tight



Terminal bend

Insulation inside the wire crimp

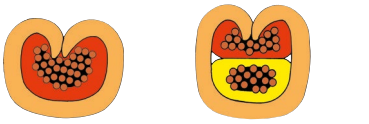


Conductor Brush protruding into terminal body

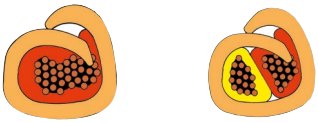
Bellmouth on wrong end



INSULATION CRIMP



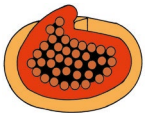
Insulation is pierced and could damage conductor



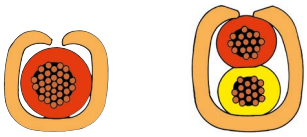
Insulation material is pierced



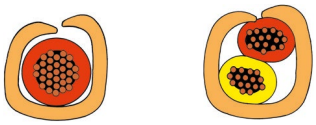
Insulation is not securely held



Insulation is over crimped



Insulation legs are not closed

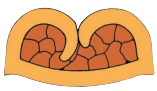


Insulation is not securely held
Legs do not overlap

WIRE CRIMP

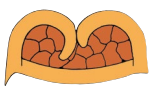
Incorrect applicator adjustment

Asymmetric crimp



Terminal feed incorrectly adjusted

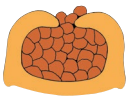
Unacceptable formation excessive flash and/or cracks



Anvil and crimper not aligned or worn

Incorrect terminal/wire selection

Wire size too large



Crimp barrel does not close

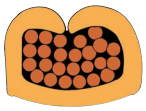
Wire size too small



Legs too close to bottom of crimp. Insufficient deformation of strands, showing voids

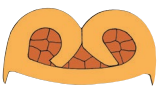
Incorrect crimp height adjustment

Crimp height too loose



Insufficient deformation, showing voids

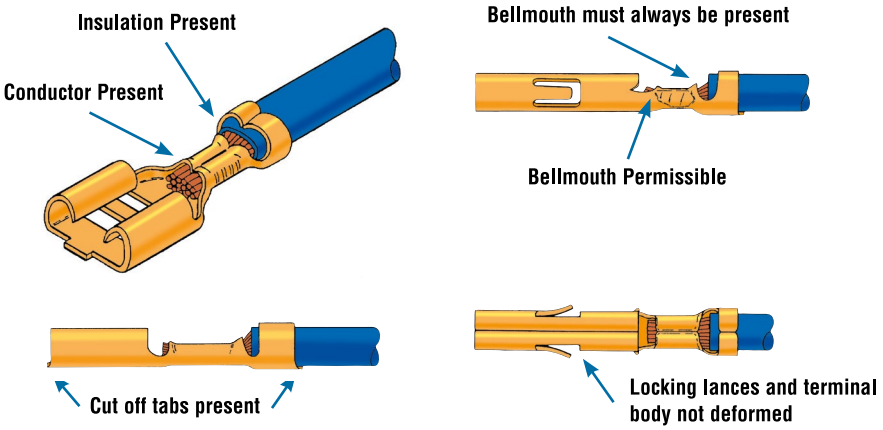
Crimp height too tight



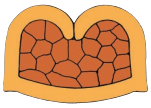
Flash at under side of crimp, due to over crimping

Correct

WIRE CRIMP



Correct selection of wire, terminal and applicator



Crimp barrel is closed, legs support each other



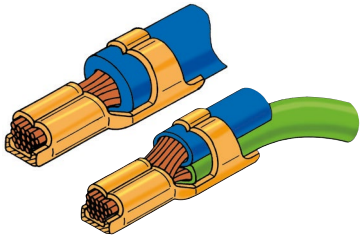
Sufficient gap between legs and bottom of crimp

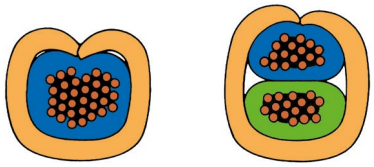
All strands are equally distributed and deformed

INSULATION CRIMP

Correct Insulation Diameter, Applicator and Terminal

F-CRIMP

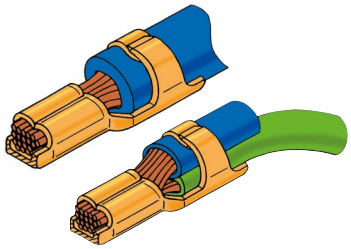


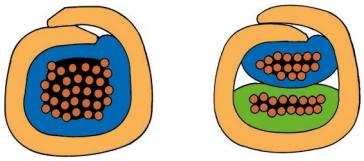


Insulation is securely held
Crimp barrel closed

For double wire applications with different size wires always place wire with smallest outer diameter in the bottom

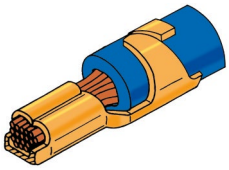
OVERLAP CRIMP

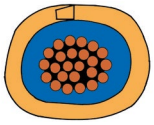




Insulation is securely held
Legs overlap

WRAP OVER CRIMP



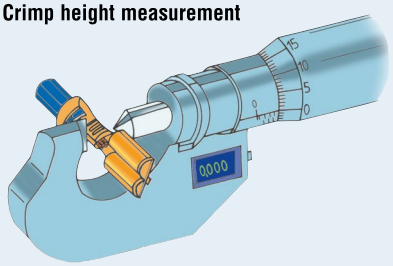


Insulation securely held
Legs must pass each other

Test

WIRE CRIMP

Crimp height measurement



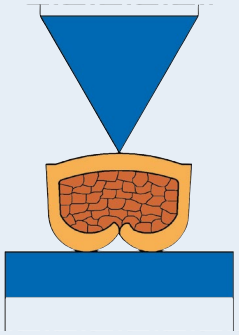
Crimp heights and tolerances

For crimp height tolerances for any given contact, please refer to the relevant application specification.

Examples:

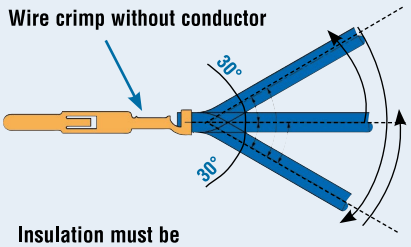
Contact	Part No.	Wire Range (mm^2)	Tolerance (mm)	Application Spec.
MQS	962885 962886	0.2–0.5	±0.03	114-18025
JPT	927775	0.5–1.0	±0.05	114-18050
JPT	927773	1.5–2.5	±0.05	114-18050

Digital Crimp Height Micrometer
(0.001 mm increments) acc. to DIN ISO 9001
Part No. 547203-1



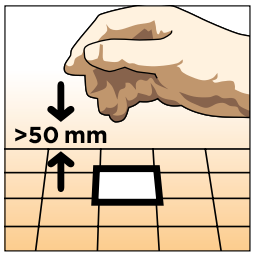
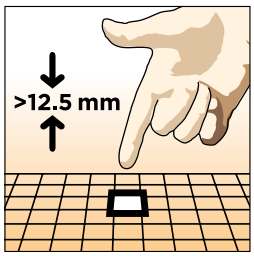
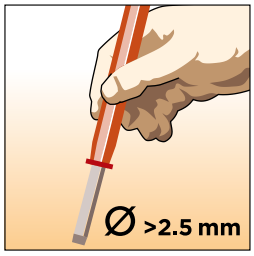
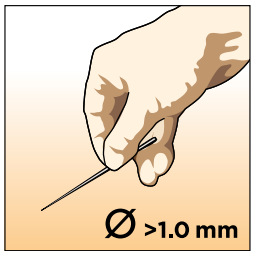
INSULATION CRIMP

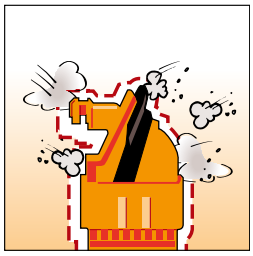
Wire crimp without conductor



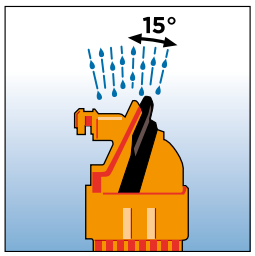
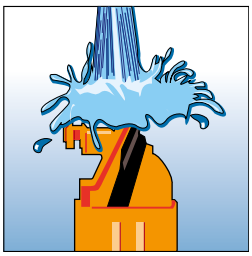
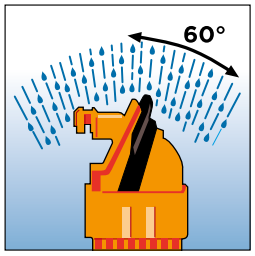
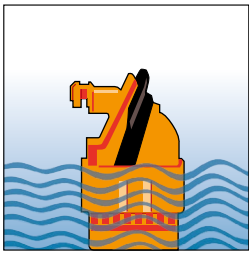
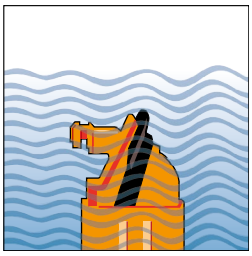
Insulation must be securely held after bend test

IP Code
Elements and Significance acc. to IEC 60529 and DIN 40050

1st Digit	Against Foreign Objects (incl. Dust)	
0		Not protected.
1		Protected against solid objects greater than 50 mm (ex. back of hand).
2		Protected against solid objects greater than 12.5 mm (ex. finger).
3		Protected against solid objects greater than 2.5 mm (ex. tool).
4		Protected against solid objects greater than 1.0 mm (ex. wire).

1st Digit	Against Foreign Objects (incl. Dust)	
5K		Dust protected.
6K		Dust tight.

IP Code
Elements and Significance acc. to IEC 60529 and DIN 40050

2nd Digit	Against Water		2nd Digit	Against Water	
0		Not protected.	5		Protected against jetting water.
1		Protected against vertically dripping water.	6		Protected against powerfully jetting water.
2		Protected against dripping water when tilted up to 15°.	6K		Protected against powerfully jetting water with increased pressure (Automotive).
3		Protected against spraying water (up to 60° inclination).	7		Protected against the temporary effects of immersion up to 1 meter.
4		Protected against splashing water.	8		Protected against continuous submersion agreed with customer, but more severe than code 7.
4K		Protected against splashing water with increased pressure.	9K		Protected against high-pressure/ steam-jet cleaning (Automotive).

RoHS* Ready
* Restriction on the Use of Hazardous Substances (RoHS)

At TE Connectivity, we support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

Getting the information you need

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week.

The Support Center also provides:

Cross-Reference from Non-compliant to Compliant Products

Ability to browse RoHS Compliant Products in our on-line catalog:
www.te.com/commerce/alt/RohsAltHome.do

Downloadable Technical Data Customer Information Presentation

More detailed information regarding the definitions used above

RoHS Compliant

Part numbers in this catalog are RoHS Compliant, unless marked otherwise. These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

Note: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

Non-RoHS Compliant

These part numbers are identified with a "t" symbol. These products do not comply with the material restrictions of the European Union Directive 2002/95/EC.

5 of 6 Compliant

A "l" symbol identifies these part numbers. These products do not fully comply with the European Union Directive 2002/95/EC because they contain lead in solderable interfaces (they do not contain any of the other five restricted substances above allowable limits). However, these products may be suitable for use in RoHS applications where there is an application-based exception for lead in solders, such as the server, storage, or networking infrastructure exemption.

Note: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced below. So whatever your questions when it comes to RoHS, we've got the answers at http://www.te.com/customersupport/rohssupportcenter/

Conversion Tables
AWG Conversion Table (Average Value)

AWG Code	Diameter (Inch)	Diameter (mm)	F (mm²)
000000	0.5800	14.733	170.0
00000	0.5165	13.13	135.0
0000	0.4600	11.684	103.8
000	0.4096	10.40	79.0
00	0.3648	9.27	67.5
0	0.3249	8.25	53.4
1	0.2893	7.34	42.2
2	0.2576	6.55	33.7
3	0.2294	5.82	26.6
4	0.2043	5.18	21.0
5	0.1819	4.62	16.9
6	0.1620	4.115	13.25
7	0.1443	3.66	10.25
8	0.1285	3.26	8.34
9	0.1144	2.90	6.6
10	0.1019	2.59	5.27
11	0.0907	2.30	4.15
12	0.0808	2.05	3.3
13	0.0720	1.83	2.63
14	0.0641	1.63	2.08
15	0.0571	1.45	1.65
16	0.0508	1.29	1.305
17	0.0453	1.14	1.01
18	0.0403	1.02	0.79
19	0.0359	0.91	0.65
20	0.0320	0.81	0.51
21	0.0285	0.72	0.407
22	0.0253	0.64	0.32
23	0.0226	0.57	0.255
24	0.0201	00.51	0.205
25	0.0179	0.455	0.162
26	0.0159	0.40	0.125
27	0.0142	0.36	0.102
28	0.0126	00.320	0.08
29	0.0113	00.287	0.0646
30	0.0100	00.254	0.0516
31	0.0089	00.226	0.04
32	0.0080	00.203	0.0324
33	0.0071	00.180	0.0255
34	0.0063	00.160	0.02
35	0.0056	00.142	0.0158
36	0.0050	00.127	0.0127
37	0.0045	00.114	0.01
38	0.0040	00.101	0.008
39	0.0035	00.089	0.0062
40	0.0031	00.079	0.0049
41	0.0028	00.071	0.00395
42	0.0025	00.064	0.00321
43	0.0022	00.056	0.00246
44	0.00198	00.050	0.00196
45	0.00176	00.045	
46	0.00157	00.040	
47	0.00140	00.036	
48	0.00124	00.031	
49	0.00110	00.028	
50	0.00099	00.025	

Remark: Starting from 0.03 mm2 (AWG 32) a wire can be crimped.

Most of the wire size ranges are mentioned in mm², as well as the insulation diameters which are in many cases only in mm's We therefore included the conversion tables on page X and page XI.

Please note that wire and insulation sizes are for guidance only. Consult the customer drawing for precise detail.

FLK and FLR stand for German DIN (72551) abbreviations.

FLK means:

In German:

- Fahrzeug Leitung Kunststoff

In English:

- Vehicle Cable Plastic

FLR means:

In German:

- Fahrzeug Leitung Reduziert

In English:

- Thin Walled Cable (reduced insulation thickness)

Conversion Tables
Inch / mm

Inch	0	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0	0	0.0254	0.0508	0.0762	0.1016	0.1270	0.1524	0.1778	0.2032	0.2286
0.010	0.2540	0.2794	0.3048	0.3302	0.3556	0.3810	0.4064	0.4318	0.4572	0.4826
0.020	0.5080	0.5334	0.5588	0.5842	0.6096	0.6350	0.6604	0.6858	0.7112	0.7366
0.030	0.7620	0.7874	0.8128	0.8382	0.8636	0.8890	0.9144	0.9398	0.9652	0.9906
0.040	1.0160	1.0414	1.0668	1.0922	1.1176	1.1430	1.1684	1.1938	1.2192	1.2446
0.050	1.2700	1.2954	1.3208	1.3462	1.3716	1.3970	1.4224	1.4478	1.4732	1.4986
0.060	1.5240	1.5494	1.5748	1.6002	1.6256	1.6510	1.6764	1.7018	1.7272	1.7526
0.070	1.7780	1.8034	1.8288	1.8542	1.8796	1.9050	1.9304	1.9558	1.9812	2.0066
0.080	2.0320	2.0574	2.0828	2.1062	2.1336	2.1590	2.1844	2.2098	2.2352	2.2606
0.090	2.2860	2.3114	2.3368	2.3622	2.3876	2.4130	2.4384	2.4638	2.4892	2.5146
0.100	2.5400	2.5654	2.5908	2.6162	2.6416	2.6670	2.6924	2.7178	2.7432	2.7686
0.110	2.7940	2.8194	2.8448	2.8702	2.8956	2.9210	2.9464	2.9718	2.9972	3.0226
0.120	3.0480	3.0734	3.0988	3.1242	3.1496	3.1750	3.2004	3.2258	3.2512	3.2766
0.130	3.3020	3.3274	3.3528	3.3782	3.4036	3.4290	3.4544	3.4798	3.5052	3.5306
0.140	3.5560	3.5814	3.6068	3.6322	3.6576	3.6830	3.7084	3.7338	3.7592	3.7846
0.150	3.8100	3.8354	3.8608	3.8862	3.9116	3.9370	3.9624	3.9878	4.0132	4.0386
0.160	4.0640	4.0894	4.1148	4.1402	4.1656	4.1910	4.2164	4.2418	4.2672	4.2926
0.170	4.3180	4.3434	4.3688	4.3942	4.4196	4.4450	4.4704	4.4958	4.5212	4.5466
0.180	4.5720	4.5974	4.6228	4.6482	4.6736	4.6990	4.7244	4.7498	4.7752	4.8006
0.190	4.8260	4.8514	4.8768	4.9022	4.9276	4.9530	4.9784	5.0038	5.0292	5.0546
0.200	5.0800	5.1054	5.1308	5.1562	5.1816	5.2070	5.2324	5.2578	5.2832	5.3086
0.210	5.3340	5.3594	5.3848	5.4102	5.4356	5.4610	5.4864	5.5118	5.5372	5.5626
0.220	5.5880	5.6134	5.6388	5.6642	5.6896	5.7150	5.7404	5.7658	5.7912	5.8166
0.230	5.8420	5.8674	5.8928	5.9182	5.9436	5.9690	5.9944	6.0198	6.0452	6.0706
0.240	6.0960	6.1214	6.1468	6.1722	6.1976	6.2230	6.2484	6.2738	6.2992	6.3246
0.250	6.3500	6.3754	6.4008	6.4262	6.4516	6.4770	6.5024	6.5278	6.5532	6.5786
0.260	6.6040	6.6294	6.6548	6.6802	6.7056	6.7310	6.7564	6.7818	6.8072	6.8326
0.270	6.8580	6.8834	6.9088	6.9342	6.9596	6.9850	7.0104	7.0358	7.0612	7.0866
0.280	7.1120	7.1374	7.1628	7.1882	7.2136	7.2390	7.2644	7.2898	7.3152	7.3406
0.290	7.3660	7.3914	7.4168	7.4422	7.4676	7.4930	7.5184	7.5438	7.5692	7.5946
0.300	7.6200	7.6454	7.6708	7.6962	7.7216	7.7470	7.7724	7.7978	7.8232	7.8486
0.310	7.8740	7.8994	7.9248	7.9502	7.9756	8.0010	8.0264	8.0518	8.0772	8.1026
0.320	8.1280	8.1534	8.1788	8.2042	8.2296	8.2550	8.2804	8.3058	8.3312	8.3566
0.330	8.3820	8.4074	8.4328	8.4582	8.4836	8.5090	8.5344	8.5598	8.5852	8.6106
0.340	8.6360	8.6614	8.6868	8.7122	8.7376	8.7630	8.7884	8.8138	8.8392	8.8646
0.350	8.8900	8.9154	8.9408	8.9662	8.9916	9.0170	9.0424	9.0678	9.0932	9.1186
0.360	9.1440	9.1694	9.1948	9.2202	9.2456	9.2710	9.2964	9.3218	9.3472	9.3726
0.370	9.3980	9.4234	9.4488	9.4742	9.4996	9.5250	9.5504	9.5758	9.6012	9.6266
0.380	9.6520	9.6774	9.7028	9.7282	9.7536	9.7790	9.8044	9.8298	9.8552	9.8806
0.390	9.9060	9.9314	9.9568	9.9822	10.0076	10.0330	10.0584	10.0838	10.1092	10.1346
0.400	10.1600	10.1854	10.2108	10.2362	10.2616	10.2870	10.3124	10.3378	10.3632	10.3886
0.410	10.4140	10.4394	10.4648	10.4902	10.5156	10.5410	10.5664	10.5918	10.6172	10.6426
0.420	10.6680	10.6934	10.7188	10.7442	10.7696	10.7950	10.8204	10.8458	10.8712	10.8966
0.430	10.9220	10.9474	10.9728	10.9982	11.0236	11.0490	11.0744	11.0998	11.1252	11.1506
0.440	11.1760	11.2014	11.2268	11.2522	11.2776	11.3030	11.3284	11.3538	11.3792	11.4046
0.450	11.4300	11.4554	11.4808	11.5062	11.5316	11.5510	11.5824	11.6078	11.6332	11.6586
0.460	11.6840	11.7094	11.7348	11.7602	11.7856	11.8110	11.8364	11.8618	11.8872	11.9126
0.470	11.9380	11.9634	11.9888	12.0142	12.0396	12.0650	12.0904	12.1158	12.1412	12.1666
0.480	12.1920	12.2174	12.2428	12.2682	12.2936	12.3190	12.3444	12.3698	12.3952	12.4206
0.490	12.4460	12.4714	12.4968	12.5222	12.5476	12.5730	12.5984	12.6238	12.6492	12.6746
0.500	12.7000									
Inch	**0**	**0.001**	**0.002**	**0.003**	**0.004**	**0.005**	**0.006**	**0.007**	**0.008**	**0.009**

Conversion Tables
Inch / mm

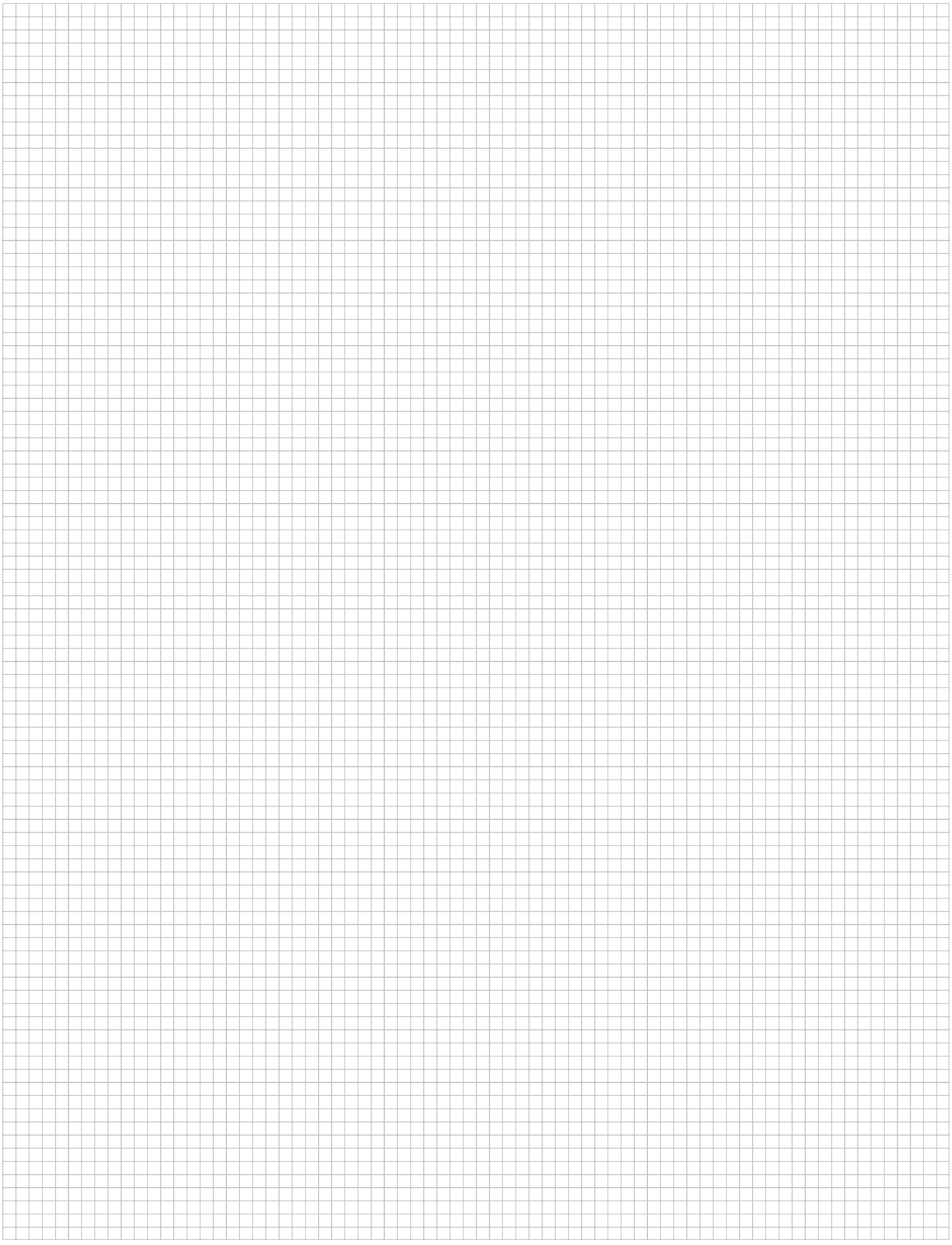
Inch	0	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.500	12.7000	12.7254	12.7508	12.7762	12.8016	12.8270	12.8524	12.8778	12.9032	12.9286
0.510	12.9540	12.9794	13.0048	13.0302	13.0556	13.0810	13.1064	13.1318	13.1572	13.1826
0.520	13.2080	13.2334	13.2588	13.2842	13.3096	13.3350	13.3604	13.3858	13.4112	13.4366
0.530	13.4620	13.4874	13.5128	15.5382	13.5636	13.5890	13.6144	13.6398	13.6652	13.6906
0.540	13.7160	13.7414	13.7668	13.7922	13.8176	13.8430	13.8684	13.8938	13.9192	13.9446
0.550	13.9700	13.9954	14.0208	14.0462	14.0716	14.0970	14.1224	14.1478	14.1732	14.1986
0.560	14.2240	14.2494	14.2748	14.3002	14.3256	14.3510	14.3764	14.4018	14.4272	14.4526
0.570	14.4780	14.5034	14.5288	14.5542	14.5796	14.6050	14.6304	14.6558	14.6812	14.7066
0.580	14.7320	14.7574	14.7828	14.8082	14.8336	14.8590	14.8844	14.9098	14.9352	14.9606
0.590	14.9860	15.0114	15.0368	15.0622	15.0876	15.1130	15.1384	15.1638	15.1892	15.2146
0.600	15.2400	15.2654	15.2908	15.3162	15.3416	15.3670	15.3924	15.4178	15.4432	15.4686
0.610	15.4940	15.5194	15.5448	15.5702	15.5956	15.6210	15.6464	15.6718	15.6972	15.7226
0.620	15.7480	15.7734	15.7988	15.8242	15.8496	15.8750	15.9004	15.9258	15.9512	15.9766
0.630	16.0020	16.0274	16.0528	16.0782	16.1036	16.1290	16.1544	16.1798	16.2052	16.2306
0.640	16.2560	16.2814	16.3068	16.3322	16.3576	16.3830	16.4084	16.4338	16.4592	16.4846
0.650	16.5100	16.5354	16.5608	16.5862	16.6116	16.6370	16.6624	16.6878	16.7132	16.7386
0.660	16.7640	16.7894	16.8148	16.8402	16.8656	16.8910	16.9164	16.9418	16.9672	16.9926
0.670	17.0180	17.0434	17.0688	17.0942	17.1196	17.1450	17.1704	17.1958	17.2212	17.2466
0.680	17.2720	17.2974	17.3228	17.3482	17.3736	17.3990	17.4244	17.4498	17.4752	17.5006
0.690	17.5260	17.5514	17.5768	17.6022	17.6276	17.6530	17.6784	17.7038	17.7292	17.7546
0.700	17.7800	17.8054	17.8308	17.8562	17.8816	17.9070	17.9324	17.9528	17.9832	18.0086
0.710	18.0340	18.0594	18.0848	18.1102	18.1356	18.1610	18.1864	18.2118	18.2372	18.2626
0.720	18.2880	18.3134	18.3388	18.3642	18.3896	18.4150	18.4404	18.4658	18.4912	19.5166
0.730	18.5420	18.5674	18.5928	18.6182	18.6436	18.6690	18.6944	18.7198	18.7452	18.7706
0.740	18.7960	18.8214	18.8468	18.8722	18.8976	18.9230	18.9484	18.9738	18.9992	19.0246
0.750	19.0500	19.0754	19.1008	19.1262	19.1516	19.1170	19.2024	19.2278	19.2532	19.2786
0.760	19.3040	19.3294	19.3548	19.3802	19.4056	19.4310	19.4564	19.4818	19.5072	19.5326
0.770	19.5580	19.5834	19.6088	19.6342	19.6596	19.6850	19.7104	19.7358	19.7612	19.7886
0.780	19.8120	19.8374	19.8628	19.8882	19.9136	19.9390	19.9644	19.9898	20.0152	20.0406
0.790	20.0660	20.0914	20.1168	20.1422	20.1676	20.1930	20.2184	20.2438	20.2692	20.2946
0.800	20.3200	20.3454	20.3708	20.3962	20.4216	20.4470	20.4724	20.4978	20.5232	20.5486
0.810	20.5740	20.5994	20.6248	20.6502	20.6756	20.7010	20.7264	20.7518	20.7772	20.8026
0.820	20.8280	20.8534	20.8788	20.9042	20.9296	20.9550	20.9804	21.0058	21.0312	21.0566
0.830	21.0820	21.1074	21.1328	21.1582	21.1836	21.2090	21.2344	21.2598	21.2852	21.3106
0.840	21.3360	21.3614	21.3868	21.4122	21.4376	21.4630	21.4884	21.5138	21.5392	21.5646
0.850	21.5900	21.6154	21.6408	21.6662	21.6916	21.7170	21.7424	21.7678	21.7932	21.8186
0.860	21.8440	21.8694	21.8948	21.9202	21.9456	21.9710	21.9964	22.0218	22.0472	22.0726
0.870	22.0980	22.1234	22.1488	22.1742	22.1996	22.2250	22.2504	22.2758	22.3012	22.3266
0.880	22.3520	22.3774	22.4028	22.4282	22.4536	22.4790	22.5044	22.5298	22.5552	22.5806
0.890	22.6060	22.6314	22.6568	22.6822	22.7076	22.7330	22.7584	22.7838	22.8092	22.8346
0.900	22.8600	22.8854	22.9108	22.9362	22.9616	22.9870	23.0124	23.0378	23.0632	23.0886
0.910	23.1140	23.1394	23.1648	23.1902	23.2156	23.2410	23.2664	23.2918	23.3172	23.3426
0.920	23.3680	23.3934	23.4188	23.4442	23.4696	23.4950	23.5204	23.5458	23.5712	23.5966
0.930	23.6220	23.6474	23.6728	23.6982	23.7236	23.7490	23.7744	23.7998	23.8252	23.8506
0.940	23.8760	23.9014	23.9268	23.9522	23.9776	24.0030	24.0284	24.0538	24.0792	24.1046
0.950	24.1300	24.1554	24.1808	24.2062	24.2316	24.2570	24.2824	24.3078	24.3332	24.3586
0.960	24.3840	24.4094	24.4348	24.4602	24.4856	24.5110	24.5364	24.5618	24.5812	24.6126
0.970	24.6380	24.6634	24.6888	24.7142	24.7396	24.7650	24.7904	24.8158	24.8412	24.8666
0.980	24.8920	24.9174	24.9428	24.9682	24.9936	25.0190	25.0444	25.0698	25.0952	25.1206
0.990	25.1460	25.1714	25.1968	25.2222	25.2476	25.2730	25.2984	25.3228	25.3492	25.3746
1.000	25.4000									
Inch	**0**	**0.001**	**0.002**	**0.003**	**0.004**	**0.005**	**0.006**	**0.007**	**0.008**	**0.009**

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8 Position (2 rows)	5		●	●	●	●
12 Position (2 rows)	6		●	●	●	●
16 Position (2 rows)	7		●	●	●	●
24 Position (2 rows)	8		●	●	●	●
40 Position (2 rows)	9		●	●	●	●
Tab Housings	10 – 14					
4 Position (1 row)	10		●	●	●	●
8 Position (2 rows)	11		●	●	●	●
12 Position (2 rows)	12		●	●	●	●
16 Position (2 rows)	13		●	●	●	●
24 Position (2 rows)	14		●	●	●	●
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40 Position	17		●	●	●	●
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4 Position	19		●	●	●	●
8 Position	20		●	●	●	●
12 Position	21		●	●	●	●
16 Position	22		●	●	●	●
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POWERTRAIN SYSTEMS

SAFETY & SECURITY SYSTEMS

CONVENIENCE

DRIVER INFORMATION

BODY & CHASSIS SYSTEMS



HIGH DENSITY IN LIMITED SPACES

TH 025 CONNECTOR SERIES INTRODUCTION

Product Features

- TH 025 connectors were designed to provide better connections and performance while securing higher density in limited spaces as required in advanced electronic automotive control systems.
- Another feature is a unique contact design to resist fretting corrosion effectively while employing a lower contact force. As a result, the low insertion force of TH 025 connectors allows a lower connector mating force while offering high density for easy handling.
- This small pitch can help customers to reduce space and weight.
- TH 025 connectors feature a pitch of just 2.2mm, compared to the current standard pitch of 2.54mm.
- TH 025 connector Series have been originally designed in Japan. A European version has been implemented, in order to fulfil the European customer requirements as:
  - Mechanical coding
  - Color coding
  - Reflow leadfree process for headers
- TH European connectors are available in a full range from 4 to 40 positions.

Applications

- Wire-to-Wire, Wire-to-Board and ECU Applications
  - Mirror
  - Multimedia applications
  - Display screens
  - Airbag ECU / Safety applications
  - Switches
  - Hand free cellphone
  - Immobilizer
  - Dashboard
  - Safety applications
  - Electrically controlled trunk lid latch
  - Tyre pressure monitoring system
  - Body controller management

Receptacle Contacts

Technical Features

- One piece contact designed to minimize fretting corrosion
- Terminal lance design to optimize cavity dimension

TH 025 Receptacle Contacts:
0.635 x 0.635mm

Insertion Force:
2.2 N max.

Contact Force:
2.8 N (at an early stage),
2.0 N (after ageing)

Current Carrying Capacity:
5 A (to 7 A within some conditions)

Wire Size Range:
from 0.13 to 0.5mm^2, specific 0.75mm^2 application possible

Contact Finish:
Tin and gold plating

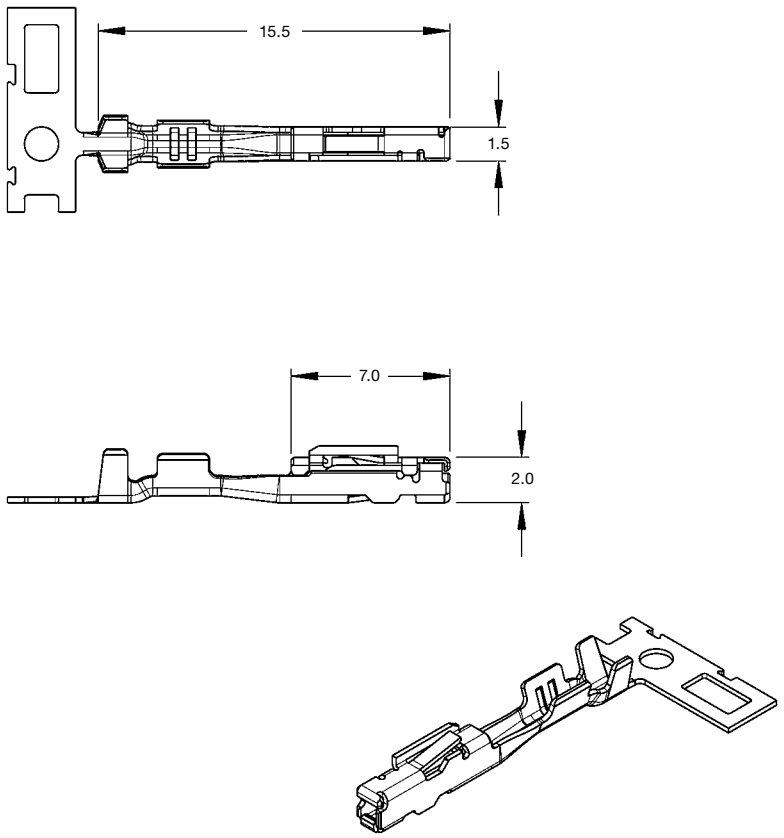
Material:
Copper Alloy

Temperature Range:
–40° C up to +105° C

Contact Retention Force:
100 N (retainer block)

Product Specification
108-5668 & 108-15299

Application Specification:
114-5250 & 114-15120
(for ISO wire)



Receptacle Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)	Material and Finish	Part Numbers				
			Strip Form	Package Quantity	Applicator	Hand Tool	Extraction Tool
0.13–0.22	0.90–1.05	Copper alloy, pre-tin plated	2005097-1	10,000	x-2151966-x	7-1579014-1	–
0.22–0.50	1.10–1.60	Copper alloy, pre-tin plated	1123343-1	10,000	x-2151494-x	7-1579014-2	1276565-1 ◆)
0.22–0.50	1.10–1.60	Gold plated (0.8 µm)	1801069-2	10,000	on request	–	–
0.22–0.50	1.10–1.60	Gold plated (0.38 µm)	1123343-2	10,000	x-2151494-x	7-1579014-2	1276565-1 ◆)
0.50–0.75 **)	1.30–1.60	Gold plated (0.8 µm)	1801248-2 *)	10,000	on request	–	–

*) Recommended for airbag applications (0.5mm^2)
**) 0.75mm^2 – Application depending on wire function
◆) Depending on the assembly of contact and housing

TH 025 Connector Series
Tab Contacts

Tab Contacts

Technical Features

- One piece contact designed to minimize fretting corrosion
- Terminal lance design to optimize cavity dimension

TH 025 Tab Contacts:
0.635 x 0.635mm Pin

Insertion Force:
2.2 N max.

Contact Force:
2.8 N (at an early stage),
2.0 N (after ageing)

Current Carrying Capacity:
5 A (to 7 A within some conditions)

Wire Size Range:
from 0.13 to 0.5mm^2

Contact Finish:
Tin plating

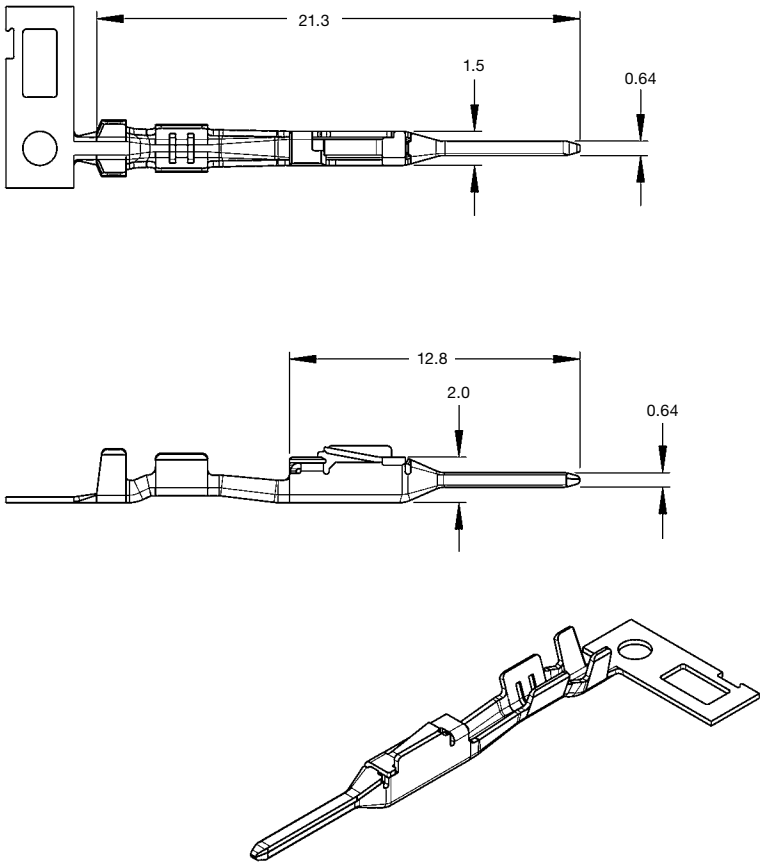
Material:
Brass

Temperature Range:
–40° C up to +105° C

Contact Retention Force:
100 N (retainer block)

Product Specification:
108-5668 & 108-15299

Application Specification:
114-5302 & 114-15120
(for ISO wire)



Tab Contacts

Wire Size Range (mm^2)	Insulation Diameter (mm)	Material and Finish	Part Numbers				
			Strip Form	Package Quantity	Applicator	Hand Tool	Extraction Tool
0.13–0.22	0.90–1.05	Brass, tin plated	2005098-1	10,000	x-2151966-x	7-1579014-1	–
0.22–0.50	1.10–1.60	Brass, tin plated	1674742-1	10,000	x-2151216-x	7-1579014-3	1579007-8 ◆)

◆) Depending on the assembly of contact and housing

TH 025 Connector Series
Receptacle Housings

4 Position (1 Row) Receptacle Housings

Technical Features

- Compact design with 2.2mm pitch

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Hinged Lid

Dielectric Strength:
1000 V AC / 1 min.

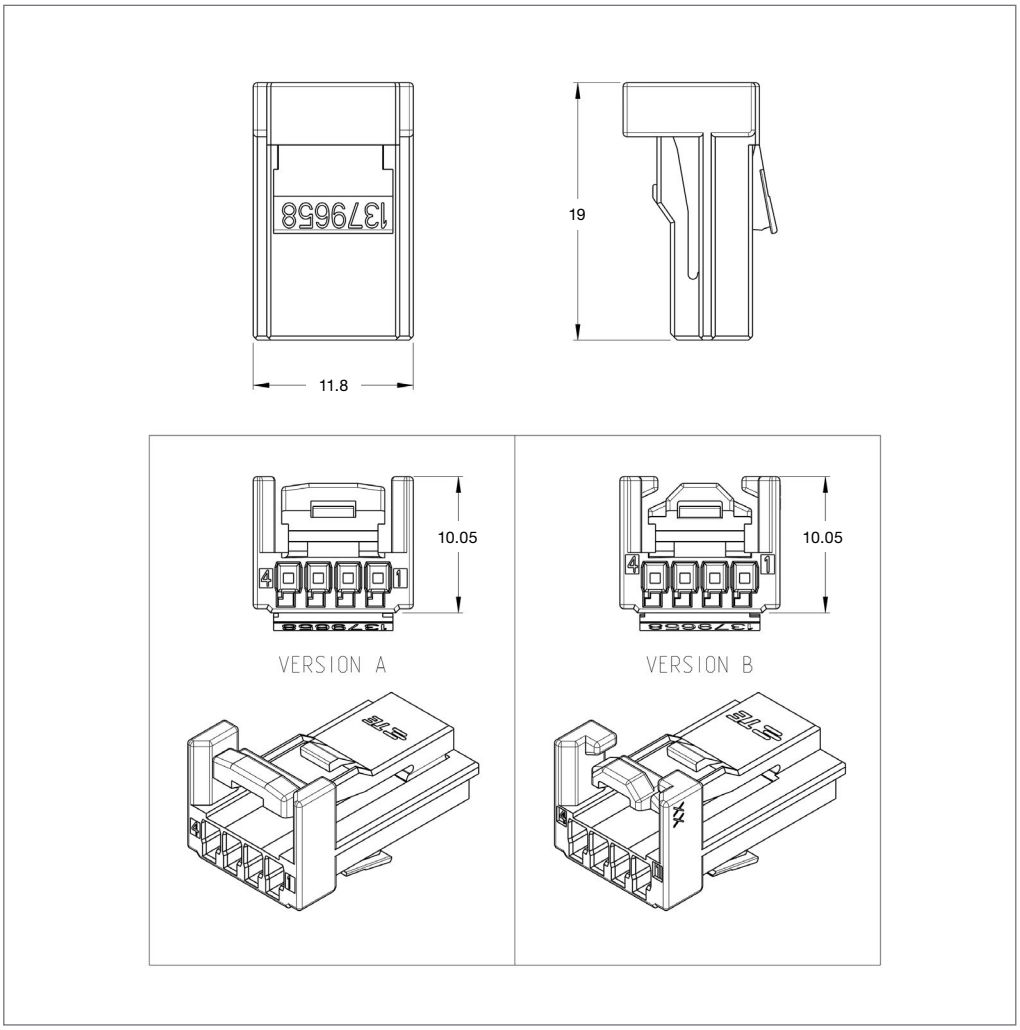
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



4 Position (1 Row) Receptacle Housings **)

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Receptacle Housing	Package Quantity	Mating Tab Housing
4 (1 row)	PBT	1	Black	1379658-1*	900	1379674-1
		2	Gray	1379658-2	900	1379674-2
		3	Blue	1379658-3*	900	1379674-3*
		4	Green	1379658-4*	900	1379674-4*
		Neutral	Natural	1-1379658-1	900	1-1379674-1

*) Contact your local TE Connectivity Sales Office for availability
**) An alternative design will be available for some items from 2015

TH 025 Connector Series
Receptacle Housings

8 Position (2 Rows) Receptacle Housings

Technical Features

- Compact design with 2.2mm pitch
- Two Parts (Housing + Retainer Block) = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

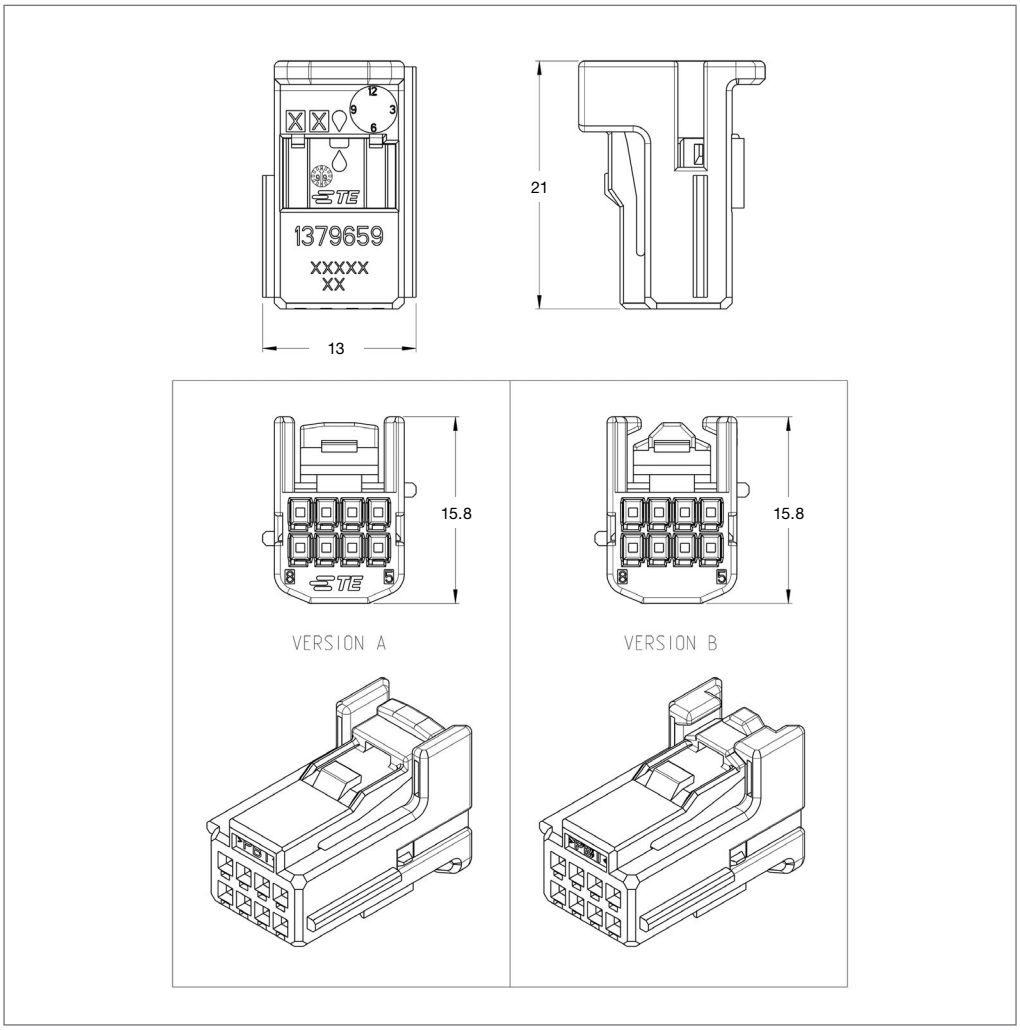
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



8 Position (2 Rows) Receptacle Housings **)

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Receptacle Housing	Package Quantity	Mating Tab Housing
8 (2 rows)	PBT	1	Black	1379659-1*	1,100	–
		2	Gray	1379659-2	1,100	–
		3	Blue	1379659-3*	1,100	–
		4	Green	1379659-4*	1,100	–
		Neutral	Natural	1379659-5*	1,100	1565804-2●)

●) Japanese version
*) Contact your local TE Connectivity Sales Office for availability
**) An alternative design will be available for some items from 2015

TH 025 Connector Series
Receptacle Housings

12 Position (2 Rows) Receptace Housing

Technical Features

- Compact design with 2.2mm pitch
- Two Parts (Housing + Retainer Block) = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

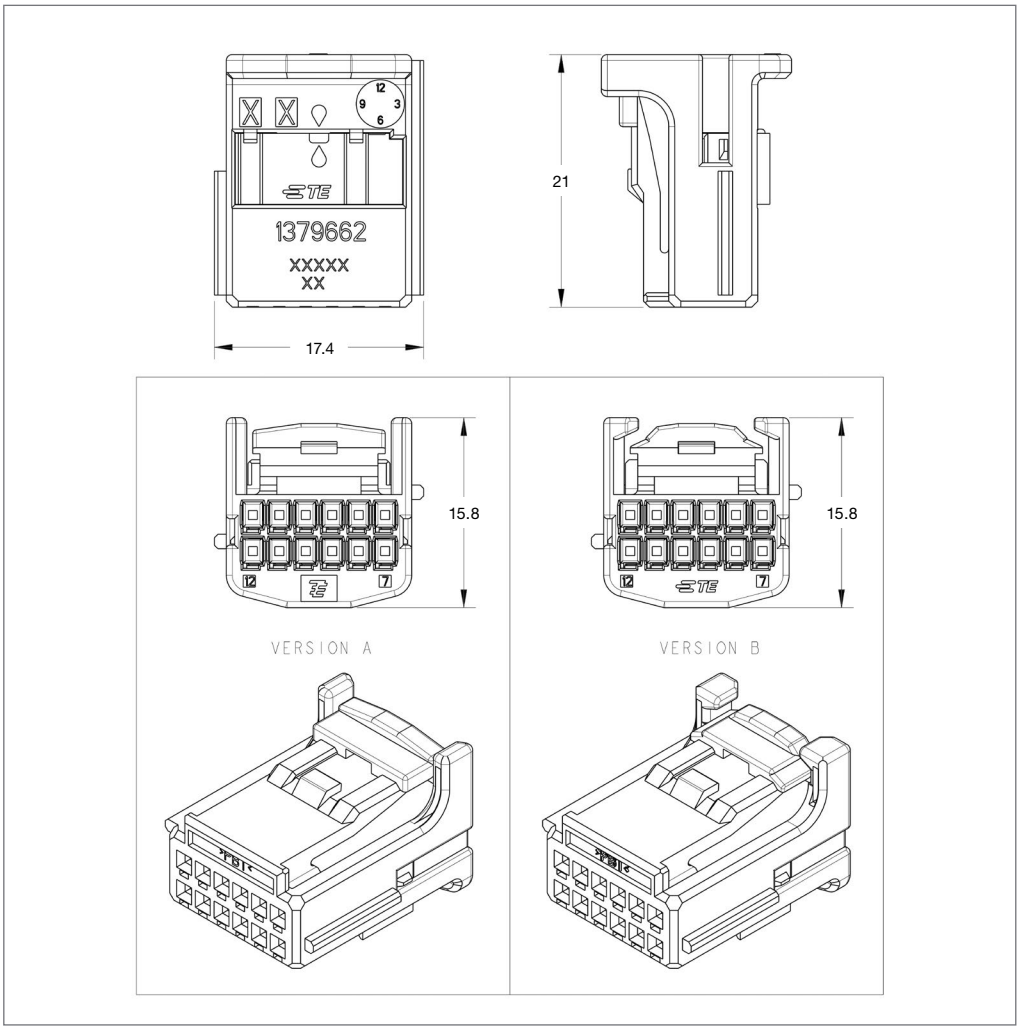
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



12 Position (2 Rows) Receptacle Housings **)

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Receptacle Housing	Package Quantity	Mating Tab Housing
12 (2 rows)	PBT	1	Black	1379662-1	800	1379675-1
		2	Gray	1379662-2	800	1379675-2
		3	Blue	1379662-3*	800	1379675-3*
		4	Green	1379662-4*	800	1379675-4*
		Neutral	Natural	1379662-5	800	1379675-5

*) Contact your local TE Connectivity Sales Office for availability
**) An alternative design will be available for some items from 2015

TH 025 Connector Series
Receptacle Housings

16 Position (2 Rows) Receptace Housing

Technical Features

- Compact design with 2.2mm pitch
- Two Parts (Housing + Retainer Block) = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

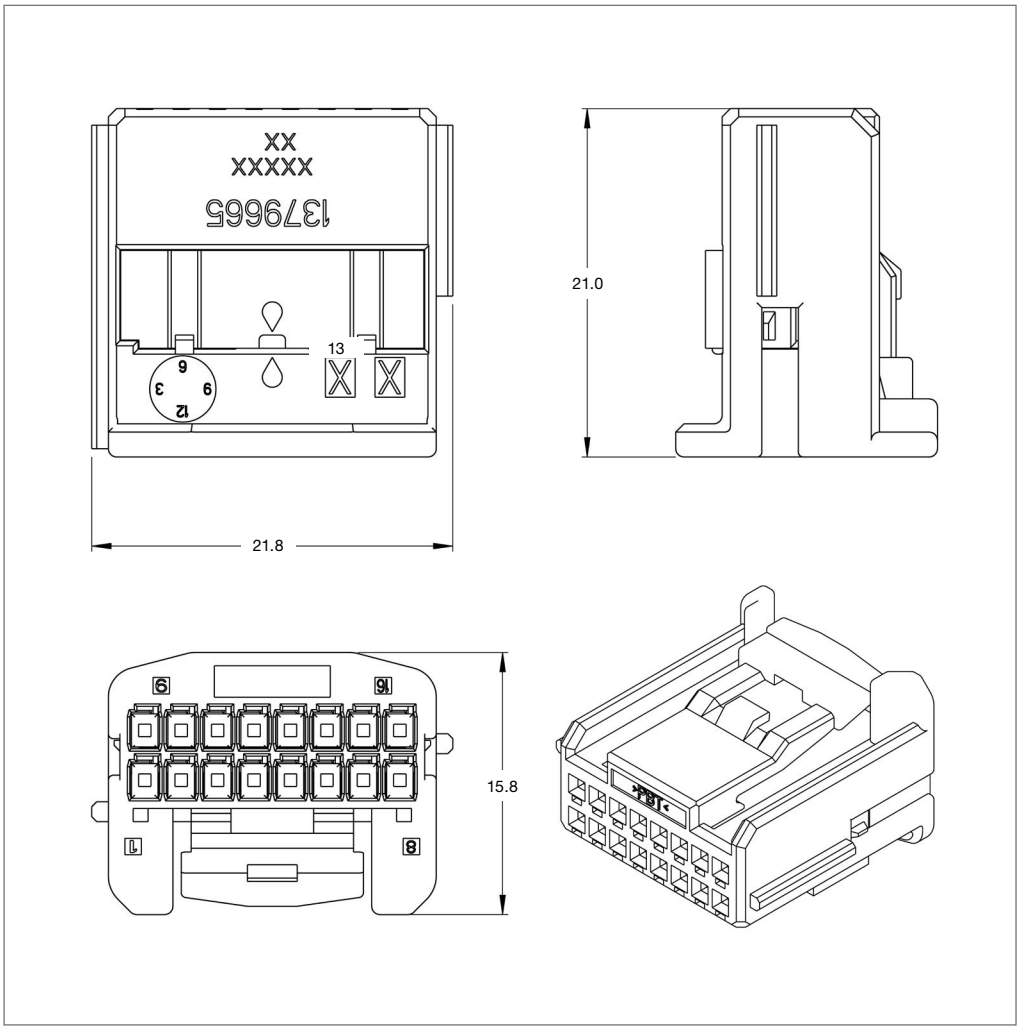
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



16 Position (2 Rows) Receptacle Housings **)

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Receptacle Housing	Package Quantity	Mating Tab Housing
16 (2 rows)	PBT	1	Black	1379665-1	700	1379678-1
		2	Gray	1379665-2	700	1379678-2
		3	Blue	1379665-3	700	1379678-3*
		4	Green	1379665-4	700	1379678-4*
		Neutral	Natural	1379665-5	700	1379678-5

*) Contact your local TE Connectivity Sales Office for availability

TH 025 Connector Series
Receptacle Housings

24 Position (2 Rows) Receptace Housing

Technical Features

- Compact design with 2.2mm pitch
- Two Parts (Housing + Retainer Block) = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

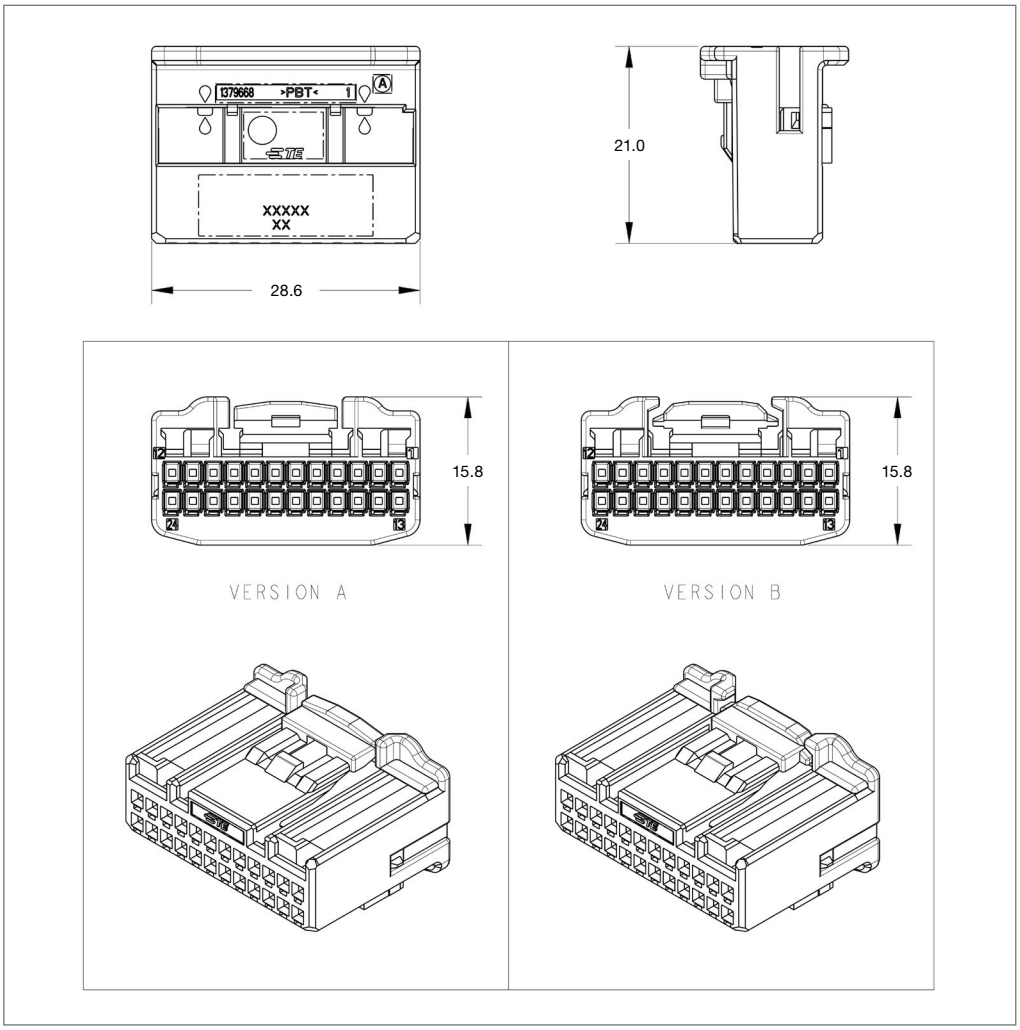
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



24 Position (2 Rows) Receptacle Housings **)

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Receptacle Housing	Package Quantity	Mating Tab Housing
24 (2 rows)	PBT	1	Black	1379668-1	500	1379681-1
		2	Gray	1379668-2	500	1379681-2
		3	Blue	1379668-3*	500	1379681-3*
		4	Green	1379668-4*	500	1379681-4*
		Neutral	Natural	1379668-5	500	1379681-5

*) Contact your local TE Connectivity Sales Office for availability
**) An alternative design will be available for some items from 2015

40 Position (2 Rows) Receptace Housing

Technical Features

- Compact design with 2.2mm pitch
- Two Parts (Housing + Retainer Block) = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

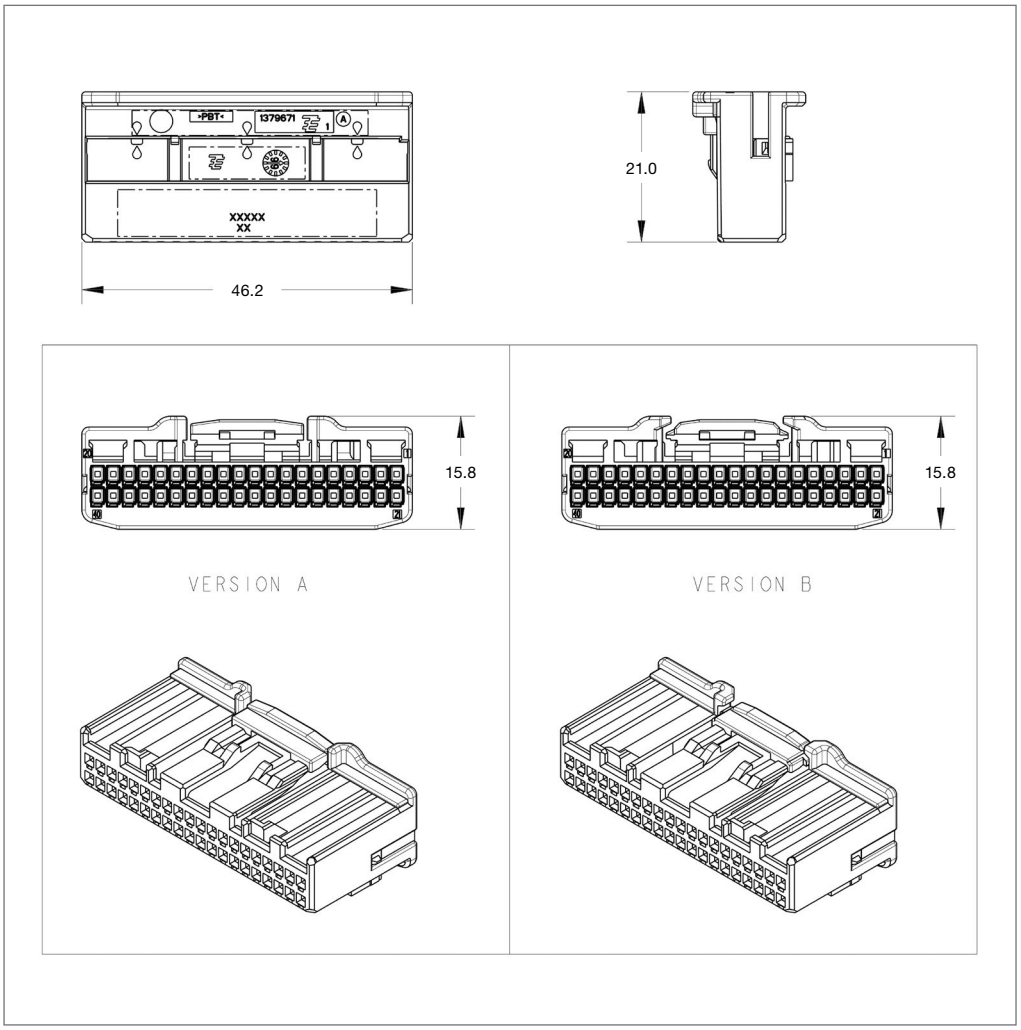
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 100 N

Product Specification:
108-15299

Application Specification:
411-15672



40 Position (2 Rows) Receptacle Housings **)

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Receptacle Housing	Package Quantity	Mating Tab Housing
40 (2 rows)	PBT	1	Black	1379671-1	400	–
		2	Gray	1379671-2	400	–
		3	Blue	1379671-3	400	–
		4	Green	1379671-4	400	–
		Neutral	Natural	1379671-5	400	–

**) An alternative design will be available for some items from 2015

TH 025 Connector Series
Tab Housings

4 Position (1 Row) Tab Housings

Technical Features

- Compact design with 2.2mm pitch

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Hinged Lid

Dielectric Strength:
1000 V AC / 1 min.

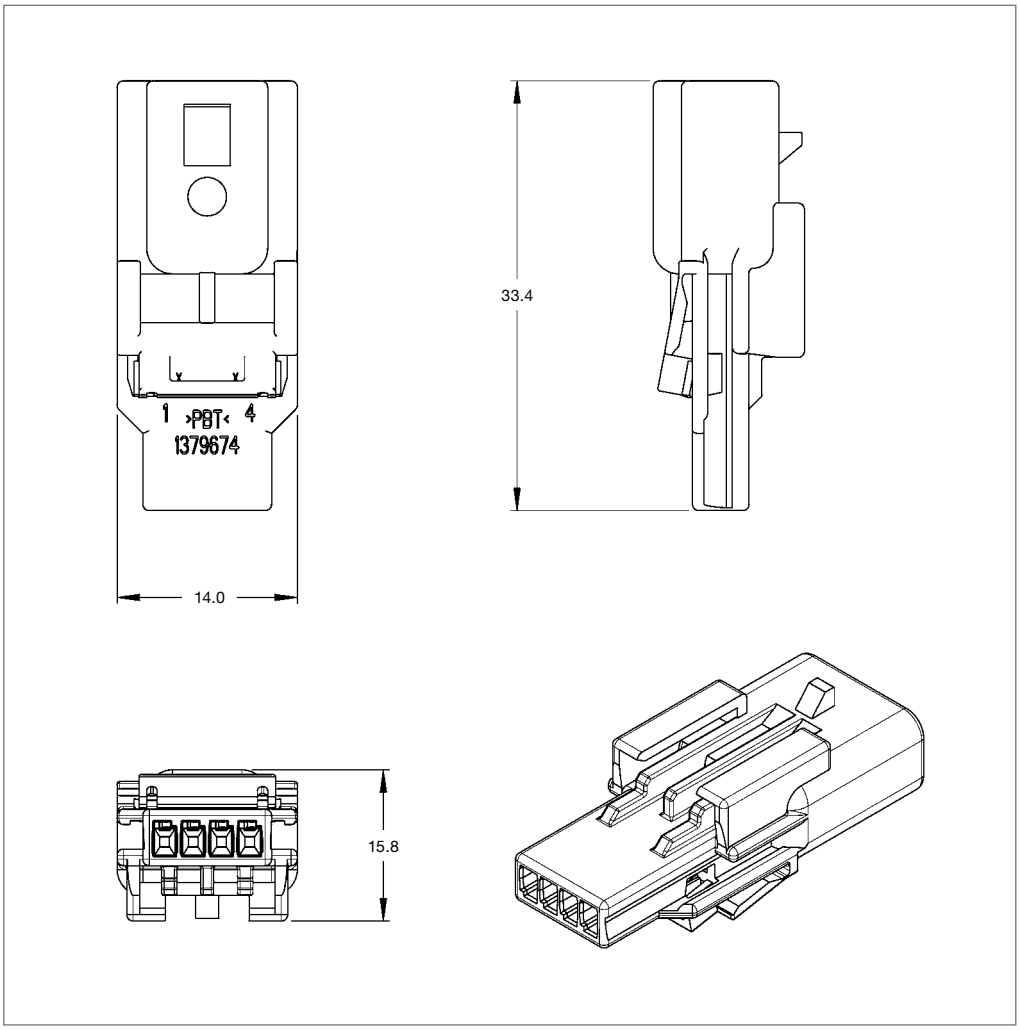
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



4 Position (1 Row) Tab Housings

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Tab Housing	Package Quantity	Mating Receptacle Housing
4 (1 row)	PBT	1	Black	1379674-1	800	1379658-1
		2	Gray	1379674-2	800	1379658-2
		3	Blue	1379674-3*	800	1379658-3*
		4	Green	1379674-4*	800	1379658-4*
		Neutral	Natural	1-1379674-1	800	1-1379658-1

*) Contact your local TE Connectivity Sales Office for availability

TH 025 Connector Series
Tab Housings

8 Position (2 Row) Tab Housings

Technical Features

- 2.2mm pitch
  (Japanese Version)
- Two Parts
  (Housing + Retainer Block)
  = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

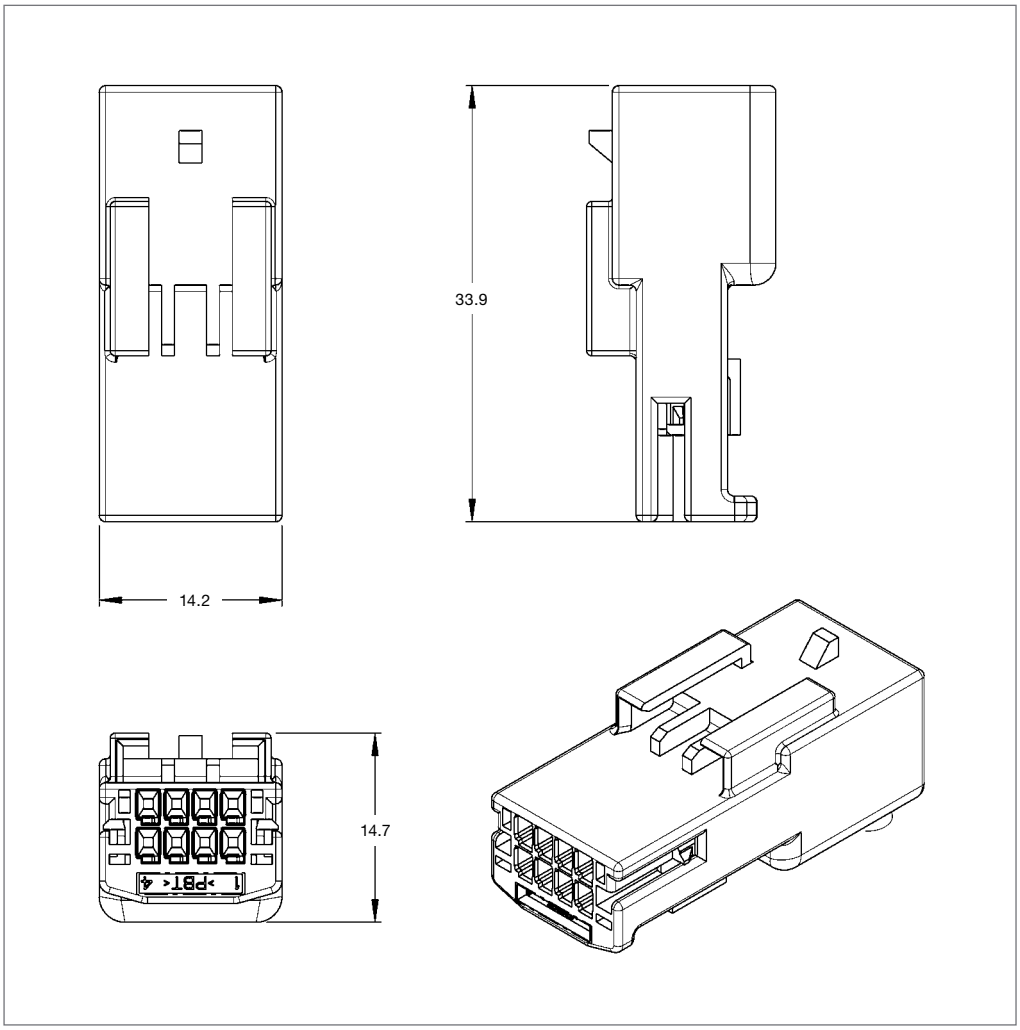
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-5787

Application Specification:
411-78011



8 Position (2 Rows) Tab Housings

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Tab Housing	Package Quantity	Mating Receptacle Housing
8 (2 rows)	PBT	Neutral	Natural	1565804-2	200	1379659-5

TH 025 Connector Series
Tab Housings

12 Position (2 Rows) Tab Housings

Technical Features

- Compact design with 2.2mm pitch
- Two Parts (Housing + Retainer Block) = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

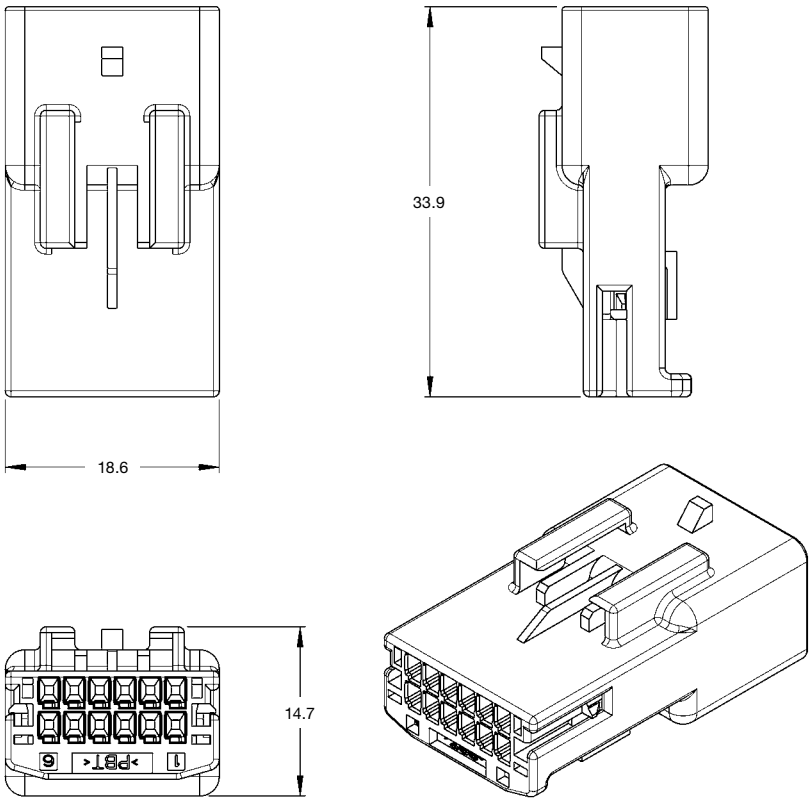
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



12 Position (2 Rows) Tab Housings

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Tab Housing	Package Quantity	Mating Receptacle Housing
12 (2 rows)	PBT	1	Black	1379675-1	500	1379662-1
		2	Gray	1379675-2	500	1379662-2
		3	Blue	1379675-3*	500	1379662-3*
		4	Green	1379675-4*	500	1379662-4*
		Neutral	Natural	1379675-5	500	1379662-5

*) Contact your local TE Connectivity Sales Office for availability

TH 025 Connector Series
Tab Housings

16 Position (2 Rows) Tab Housings

Technical Features

- Compact design with 2.2mm pitch
- Two Parts (Housing + Retainer Block) = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

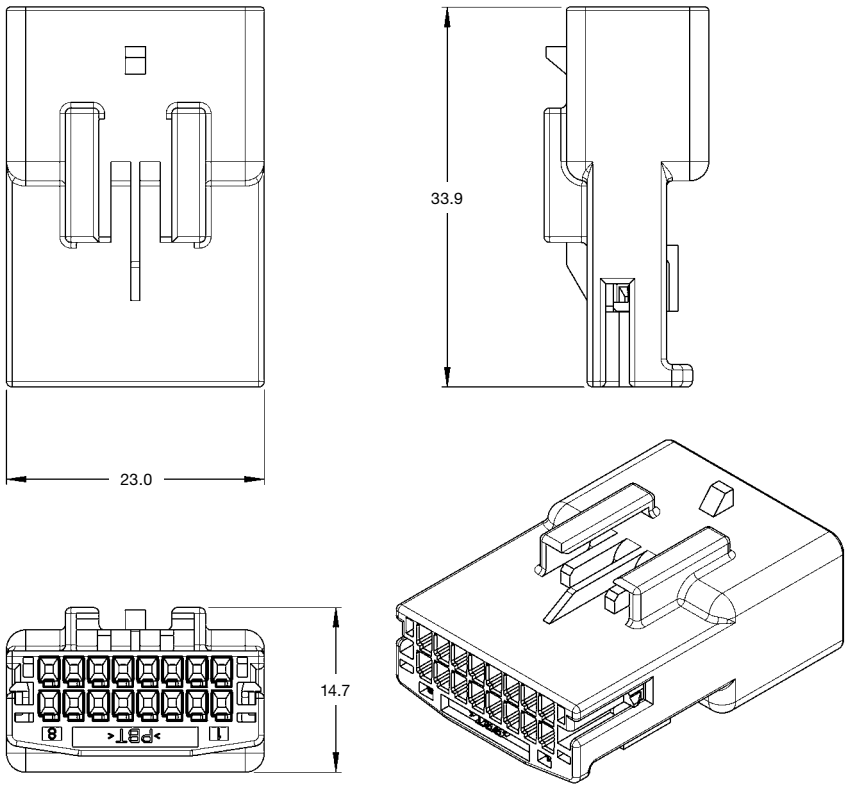
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



16 Position (2 Rows) Tab Housings

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Tab Housing	Package Quantity	Mating Receptacle Housing
16 (2 rows)	PBT	1	Black	1379678-1	400	1379665-1
		2	Gray	1379678-2	400	1379665-2
		3	Blue	1379678-3*	400	1379665-3*
		4	Green	1379678-4*	400	1379665-4*
		Neutral	Natural	1379678-5	400	1379665-5

*) Contact your local TE Connectivity Sales Office for availability

TH 025 Connector Series
Tab Housings

24 Position (2 Rows) Tab Housings

Technical Features

- Compact design with 2.2mm pitch
- Two Parts (Housing + Retainer Block) = 1 Piece

Temperature Range:
–40° C up to +105° C

Secondary Lock:
Housing Retainer Block

Dielectric Strength:
1000 V AC / 1 min.

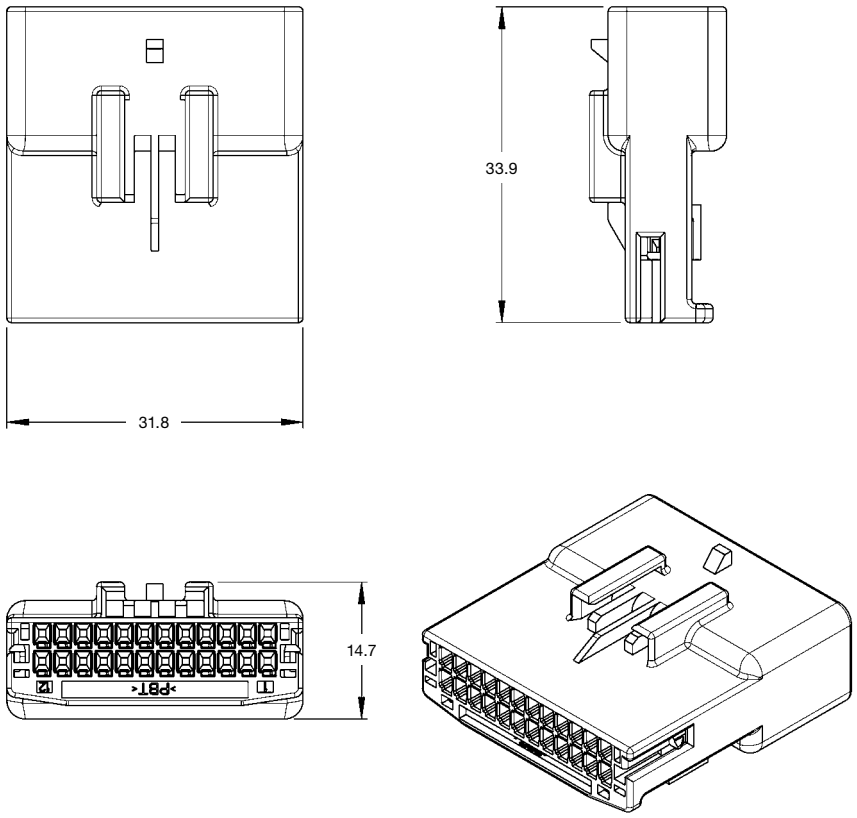
Insulation Resistance:
>100 MΩ

Housing Material:
PBT

Connector Mating Force:
Max. 60 N

Product Specification:
108-15299

Application Specification:
411-15672



24 Position (2 Rows) Tab Housings

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers		
				Tab Housing	Package Quantity	Mating Receptacle Housing
24 (2 rows)	PBT	1	Black	1379681-1	300	1379668-1
		2	Gray	1379681-2	300	1379668-2
		3	Blue	1379681-3*	300	1379668-3*
		4	Green	1379681-4*	300	1379668-4*
		Neutral	Natural	1379681-5	300	1379668-5

*) Contact your local TE Connectivity Sales Office for availability

TH 025 Connector Series
Headers – Vertical Type

4 Position Vertical Header

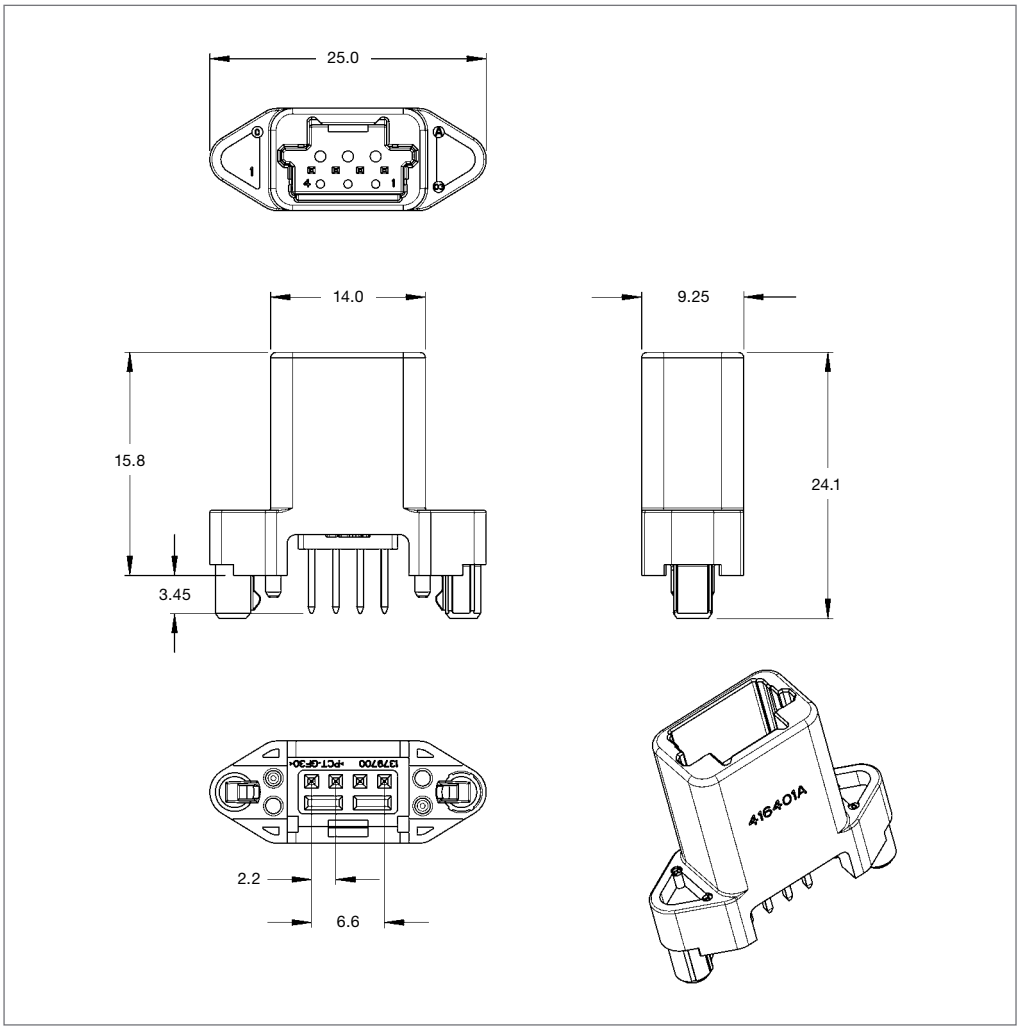
Technical Features

- Compact design with 2.2mm pitch
- Designed for Reflow Leadfree Process
- Board Locks
- Locating Pin (PCB Mechanical Coding)

Housing Material:
PCT

Pin Material:
Copper Alloy

Product Specification:
108-15326



4 Position Vertical Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers			
				Header	Package Quantity	Packaging	Mating Receptacle Housing
4	PCT	1	Black	1379700-1	1,400	Tray	1379658-1
		2	Gray	1379700-2	1,400	Tray	1379658-2

TH 025 Connector Series
Headers – Vertical Type

24 Position Vertical Header

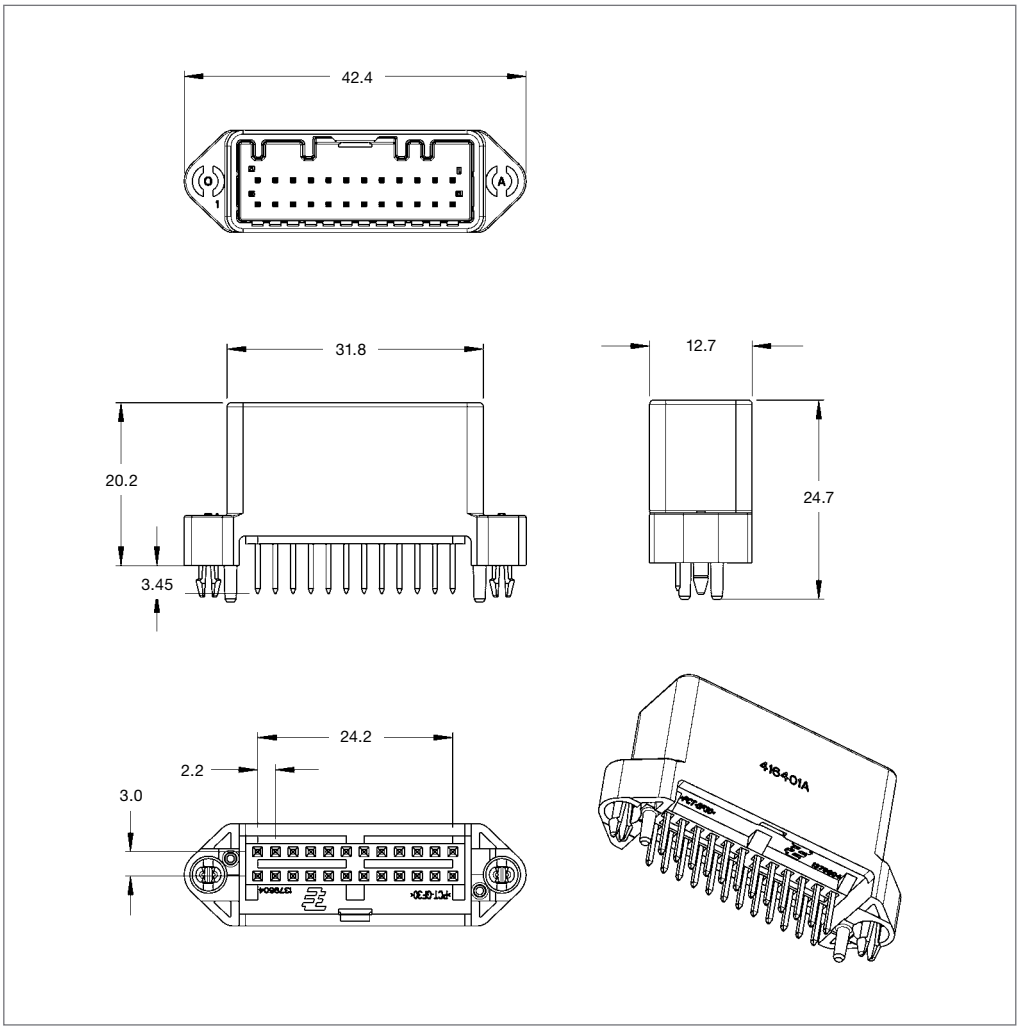
Technical Features

- Compact design with 2.2mm pitch
- Designed for Reflow Leadfree Process
- Board Locks
- Locating Pin (PCB Mechanical Coding)

Housing Material:
PCT

Pin Material:
Copper Alloy

Product Specification:
108-15422



24 Position Vertical Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers			
				Header	Package Quantity	Packaging	Mating Receptacle Housing
24	PCT	1	Black	1379604-1	650	Tray	1379668-1
		2	Gray	1379604-2	650	Tray	1379668-2

40 Position Vertical Header

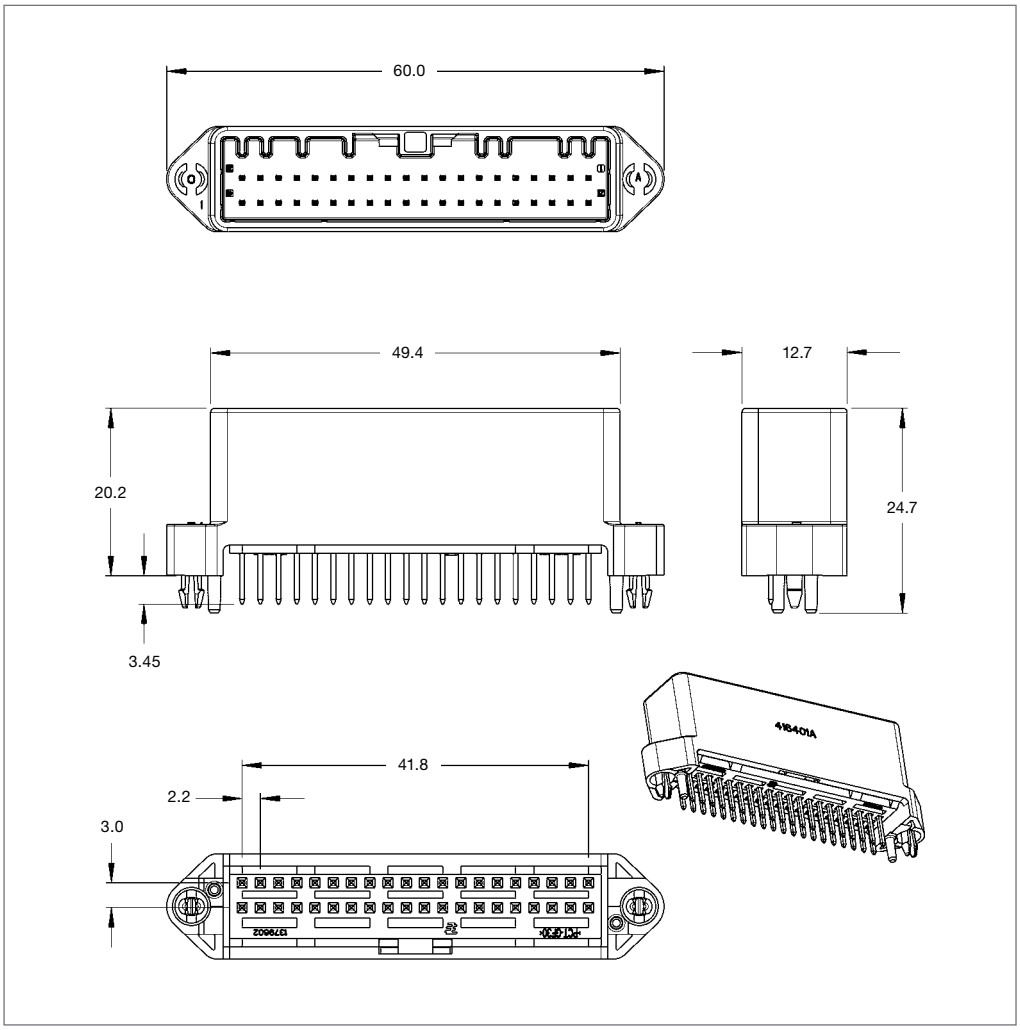
Technical Features

- Compact design with 2.2mm pitch
- Designed for Reflow Leadfree Process
- Board Locks
- Locating Pin (PCB Mechanical Coding)

Housing Material:
PCT

Pin Material:
Copper Alloy

Product Specification:
108-15422



40 Position Vertical Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers			
				Header	Package Quantity	Packaging	Mating Receptacle Housing
40	PCT	1	Black	1-1379602-1	390	Tray	1379671-1
		2	Gray	1-1379602-2	390	Tray	1379671-2
		4	Green	1-1379602-4	390	Tray	1379671-4

Other designs available on request

8 Position Right-Angle Header

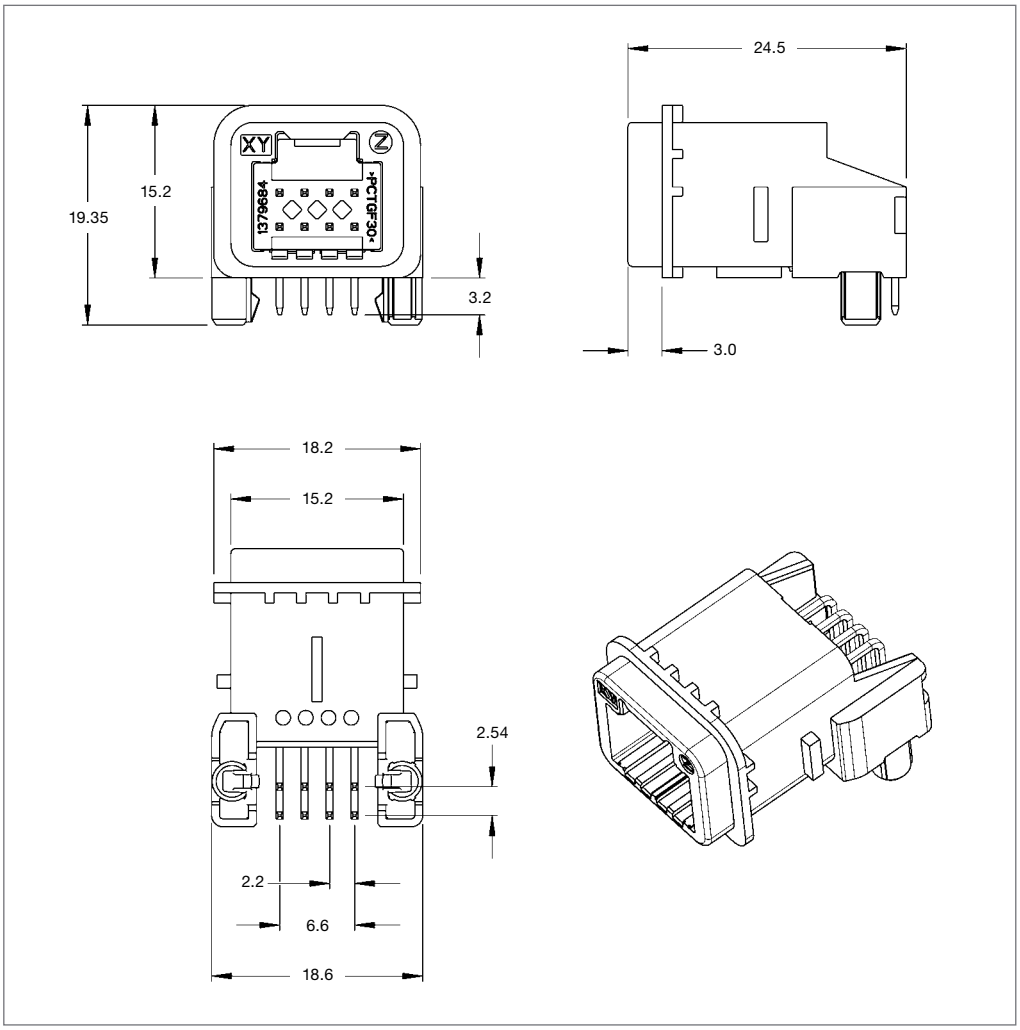
Technical Features

- Compact design with 2.2mm pitch
- Designed for Reflow Leadfree Process
- Board Locks
- Locating Pin (PCB Mechanical Coding)

Housing Material:
PCT

Pin Material:
Copper Alloy

Product Specification:
108-15383



8 Position Right-Angle Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers			
				Header	Package Quantity	Packaging	Mating Receptacle Housing
8	PCT	1	Black	1379684-1	1,210	Tray	1379659-1
		2	Gray	1379684-2	1,100	Special Tray	1379659-2
		3	Blue	1379684-3	1,100	Special Tray	1379659-3
		1	Black	1379684-4	1,600	Tubes	1379659-1
		2	Gray	1379684-5	1,600	Tubes	1379659-2
		3	Blue	1379684-6	1,600	Tubes	1379659-3
		3	Blue	1379684-7	1,210	Tray	1379659-3
		1	Black	1-1379684-1	1,100	Special Tray	1379659-1

4 Position Right-Angle Header

Technical Features

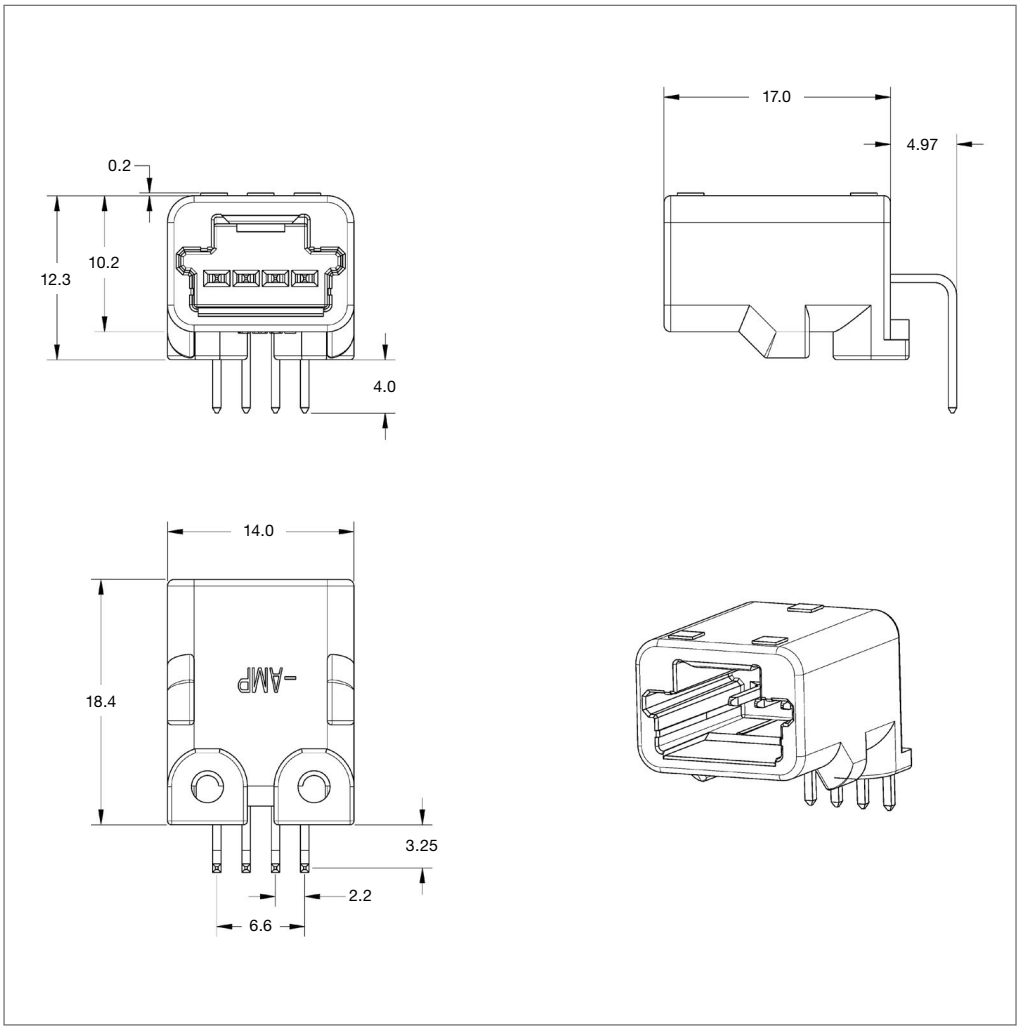
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-5664

Application Specification:
114-5250



4 Position Right-Angle Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
4	PBT	1	Natural	1565749-1	–	Tube	1379658-1	1473672-1
	PBT	2	Gray	1565749-3	–	Tube	1379658-2	1473672-2
	SPS	2	Gray	1565749-4	–	Tube	1379658-2	1473672-2
	SPS	2	Gray	1565749-5	–	Tube	1379658-2	1473672-2
	PBT	1	Natural	1565749-6	–	Tube	1379658-1	1473672-1
	SPS	1	Natural	1565749-7	–	Tube	1379658-1	1473672-1
	SPS	2	Gray	1565749-8	–	Tube	1379658-2	1473672-2
	SPS	1	Natural	1-1565749-0	–	Tube	1379658-1	1473672-1
	PBT	1	Natural	1-1565749-1	–	Tube	1379658-1	1473672-1
	PBT	2	Gray	1-1565749-2	–	Tube	1379658-2	1473672-2
	PBT	2	Gray	1-1565749-3	–	Tube	1379658-2	1473672-2

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

8 Position Right-Angle Header

Technical Features

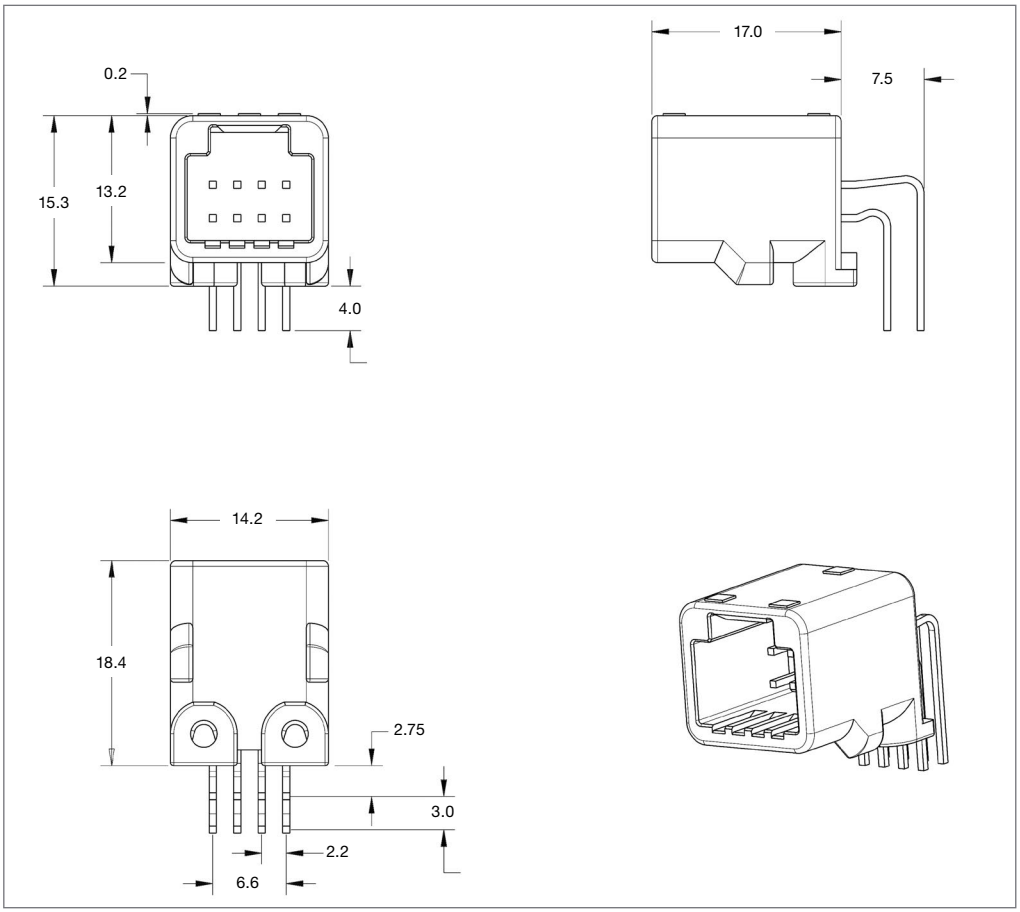
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-5668

Application Specification:
114-5250



8 Position Right-Angle Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
	PBT		Natural	1376350-1				
	PBT		Natural	1376350-2				
	PBT		Natural	1376350-3				
	PBT		Black	1376350-4				
	PBT		Black	1376350-6				
	PBT		Natural	1376350-7				
	PBT		Black	1376350-8				
	SPS		Natural	1376350-9				
	SPS		Natural	1-1376350-0				
	SPS		Black	1-1376350-1				
	SPS		Natural	1-1376350-2				
8	SPS	Neutral	Natural	1-1376350-3	–	Tube	1379659-5	1376352-1
	PBT		Black	1-1376350-4				
	PBT		Black	1-1376350-5				
	PBT		Black	1-1376350-6				
	PBT		Natural	6376350-3				
	PBT		Black	6376350-4				
	PBT		Natural	1-1376350-7				
	SPS		Black	1-1376350-9				
	SPS		Natural	2-1376350-0				
	PBT		Natural	2-1376350-1				
	PBT		Black	2-1376350-2				
	SPS		Natural	2-1376350-3				
	SPS		Natural	2-1376350-5				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

12 Position Right-Angle Header

Technical Features

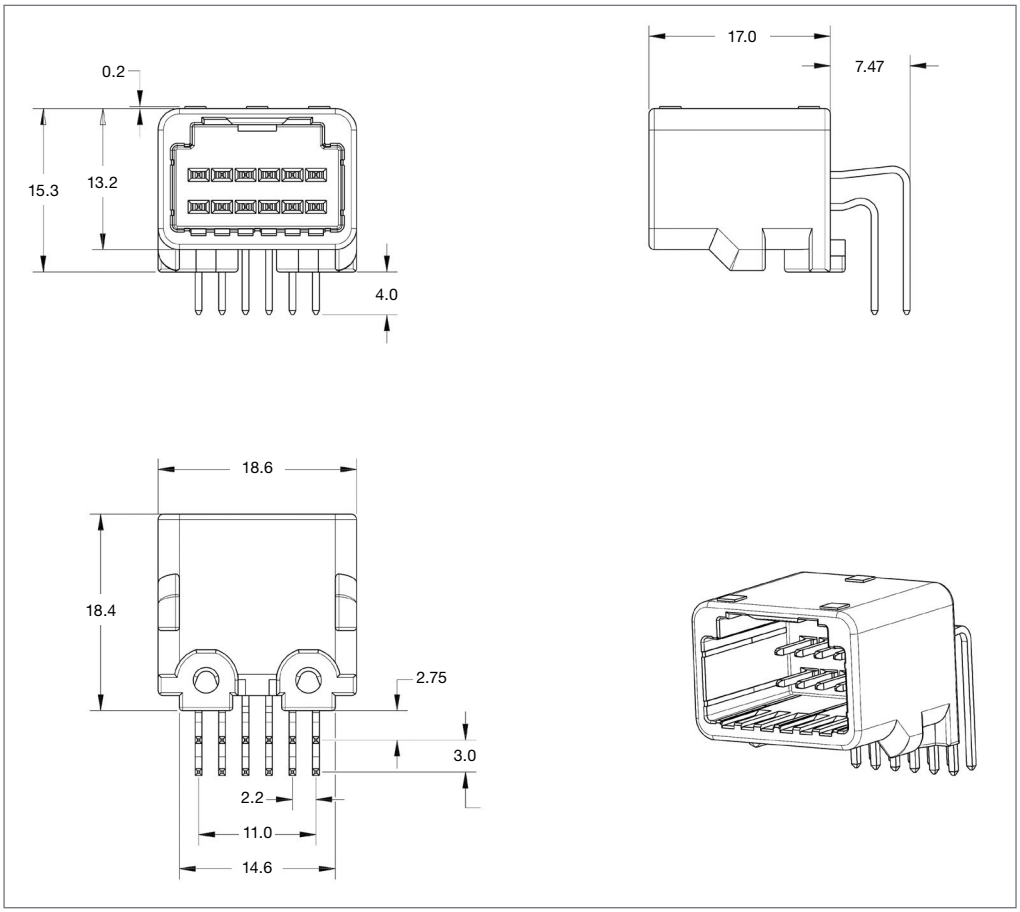
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
see table

Pin Material:
Brass

Product Specification:
108-5668

Appication Specification:
114-5250



12 Position Right-Angle Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
	PBT		Natural	1318772-1				
	PBT		Natural	1318772-2				
	PBT		Natural	1318772-3				
	PBT		Black	1318772-4				
	PBT		Black	1318772-5				
	PBT		Natural	1318772-6				
	PBT		Black	1318772-7				
	PBT		Natural	1318772-9				
	PBT		Black	1-1318772-0				
	PBT		Black	1-1318772-2				
	SPS		Natural	1-1318772-3				
	SPS		Natural	1-1318772-4				
12	SPS	Neutral	Black	1-1318772-5	–	Tube	1379662-5	1318774-1
	SPS		Natural	1-1318772-6				
	SPS		Black	1-1318772-7				
	SPS		Black	1-1318772-8				
	SPS		Natural	1-1318772-9				
	PBT		Black	2-1318772-0				
	PBT		Black	2-1318772-1				
	PBT		Natural	6318772-3				
	PBT		Black	6318772-4				
	PBT		Black	6318772-5				
	PBT		Natural	2-1318772-2				
	PBT		Black	2-1318772-3				
	SPS		Black	2-1318772-4				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

16 Position Right-Angle Header

Technical Features

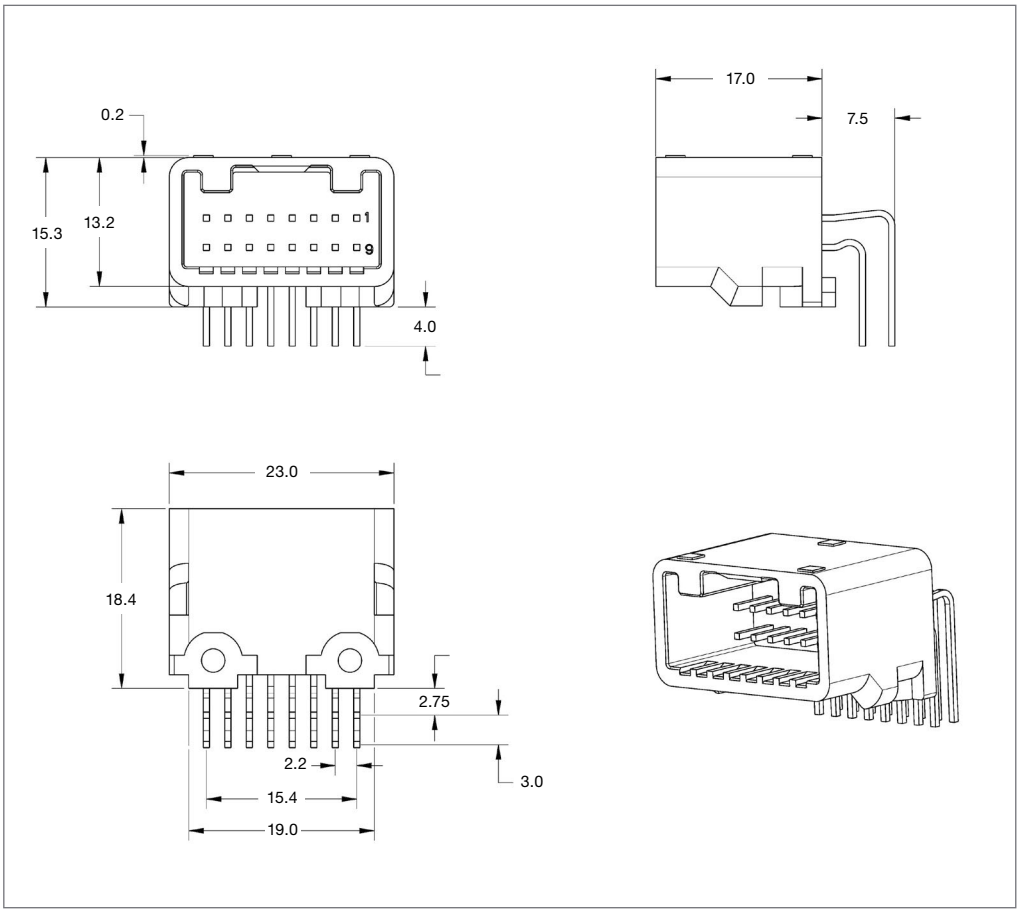
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-5668

Application Specification:
114-5250



16 Position Right-Angle Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
	PBT		Natural	1318382-1				
	PBT		Natural	1318382-2				
	PBT		Natural	1318382-3				
	PBT		Natural	1318382-4				
	PBT		Black	1318382-5				
	PBT		Natural	1318382-6				
	SPS		Natural	1318382-8				
	PBT		Black	1318382-9				
	PBT		Black	1-1318382-0				
16	SPS	Neutral	Natural	1-1318382-1	–	Tube	1379665-5	1318386-1
	SPS		Natural	1-1318382-2				
	PBT		Black	1-1318382-3				
	SPS		Natural	1-1318382-4				
	SPS		Natural	1-1318382-5				
	SPS		Natural	1-1318382-6				
	SPS		Natural	1-1318382-7				
	PBT		Natural	1-1318382-8				
	PBT		Natural	6318382-3				
	PBT		Black	6318382-5				
	PBT		Natural	6318382-6				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

24 Position Right-Angle Header

Technical Features

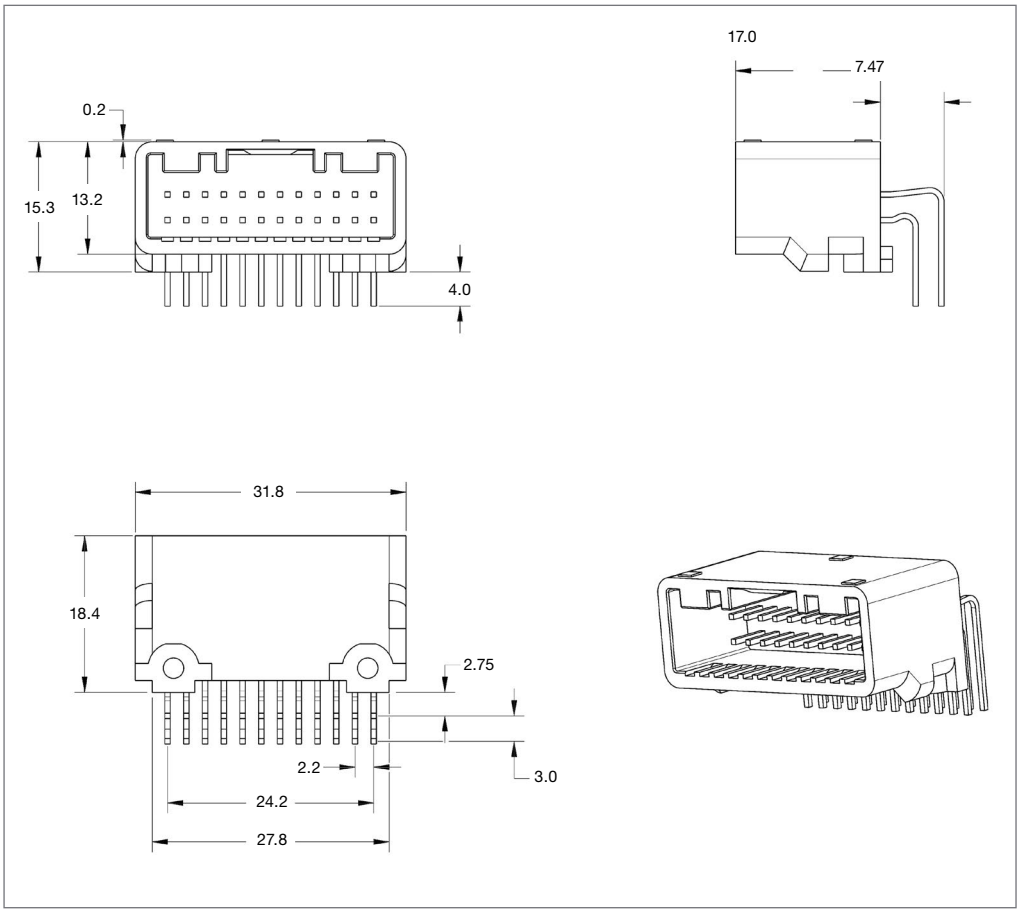
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
see table

Pin Material:
Brass

Product Specification:
108-5668

Appication Specification:
114-5250



24 Position Right-Angle Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
24	PBT	Neutral	Natural	1318853-1	–	Tube	1379668-5	1318917-1
	PBT		Natural	1318853-2				
	PBT		Natural	1318853-3				
	PBT		Black	1318853-4				
	PBT		Black	1318853-5				
	PBT		Natural	1318853-8				
	PBT		Black	1318853-9				
	PBT		Natural	1-1318853-0				
	PBT		Black	1-1318853-1				
	PBT		Natural	1-1318853-2				
	SPS		Natural	1-1318853-3				
	SPS		Black	1-1318853-6				
	SPS		Natural	1-1318853-7				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

32 Position Right-Angle Header

Technical Features

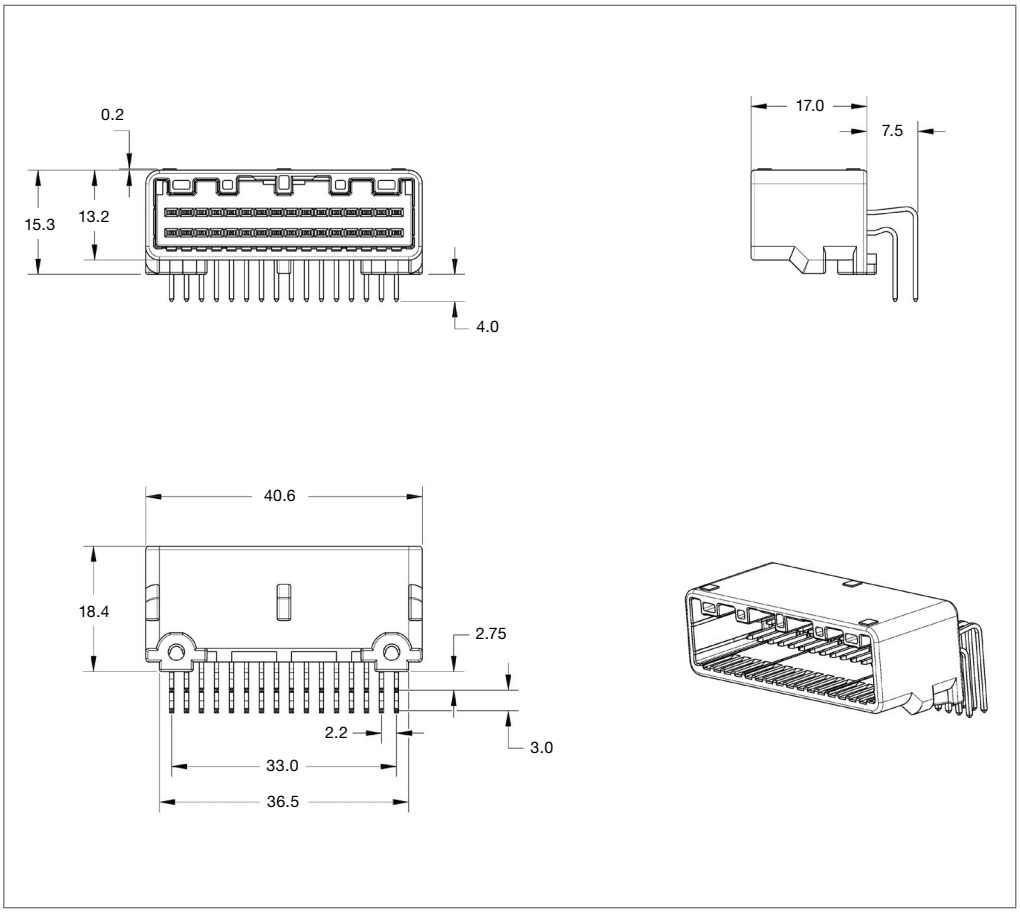
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-5668

Application Specification:
114-5250



32 Position Right-Angle Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
32	PBT	Neutral	Natural	1318745-1	–	Tube	NA	1318747-1
	PBT			1318745-2				
	PBT			1318745-3				
	PBT			1318745-4				
	SPS			1318745-5				
	PBT			1318745-6				
	SPS			1318745-7				
	SPS			1318745-8				
	PBT			1318745-9				
	PBT			1-1318745-0				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

40 Position Right-Angle Header

Technical Features

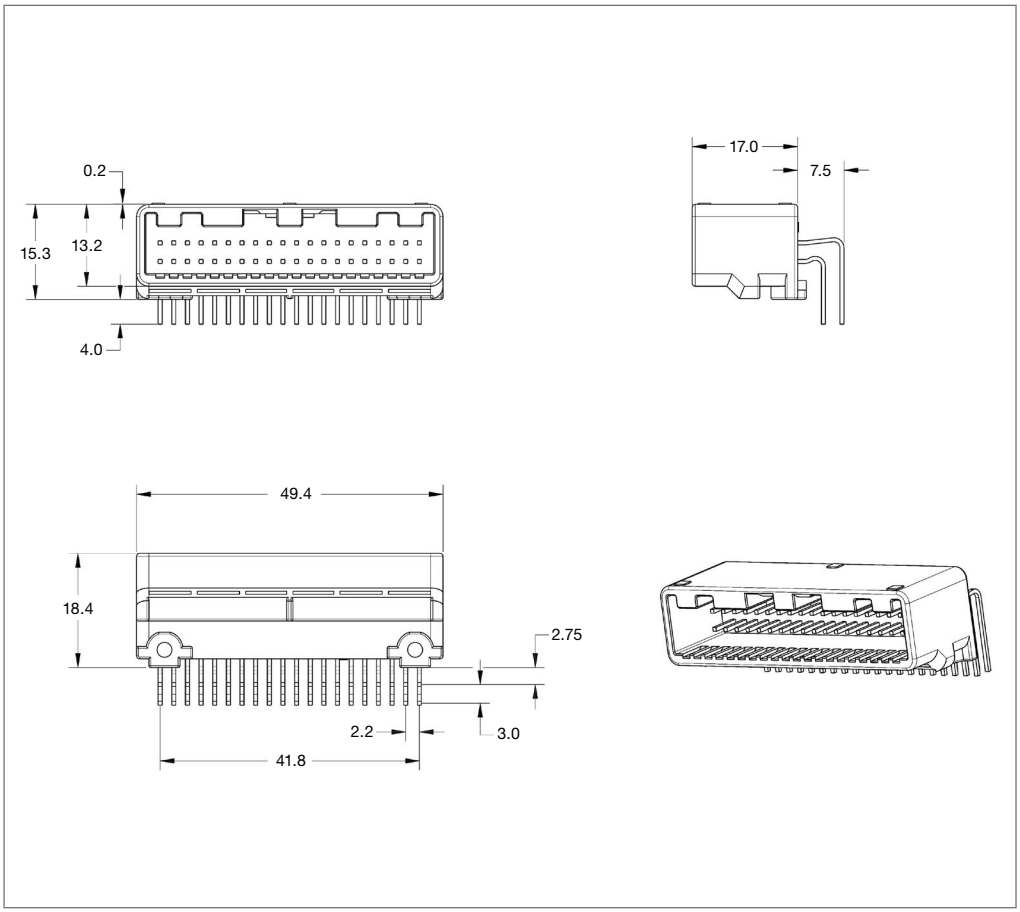
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
see table

Pin Material:
Brass

Product Specification:
108-5668

Appication Specification:
N/A



40 Position Right-Angle Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
	PBT		Natural	1318384-1				
	PBT		Natural	1318384-2				
	PBT		Natural	1318384-4				
	PBT		Natural	1318384-5				
	PBT		Natural	1318384-7				
	PBT		Black	1-1318384-0				
	SPS		Natural	1-1318384-2				
	SPS		Natural	1-1318384-3				
	PBT		Black	1-1318384-4				
40	PBT	Neutral	Natural	1-1318384-5	–	Tube	1379671-5	1318389-1
	PBT		Natural	1-1318384-6				
	SPS		Natural	1-1318384-7				
	PBT		Natural	1-1318384-8				
	PBT		Natural	1-1318384-9				
	PBT		Natural	6318384-5				
	SPS		Natural	2-1318384-0				
	SPS		Natural	2-1318384-3				
	PBT		Black	2-1318384-4				
	PBT		Natural	2-1318384-6				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

12 Position Vertical Header

Technical Features

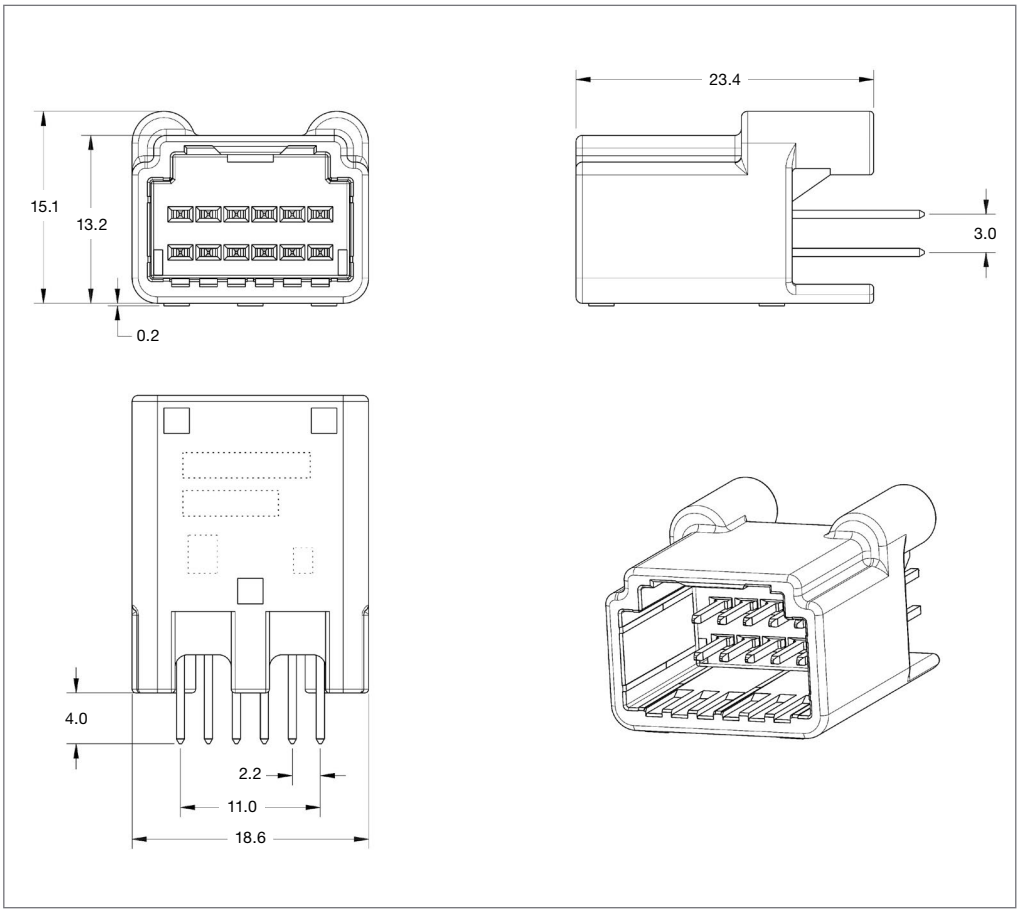
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-5668

Application Specification:
114-5250



12 Position Vertical Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
12	PBT	Neutral	Natural	1473898-1	–	Tube	1379662-5	1318774-1
	SPS		Natural	1473898-2				
	SPS		Natural	1473898-3				
	SPS		Natural	1473898-4				
	SPS		Natural	1473898-5				
	PBT		Natural	1473898-6				
	SPS		Natural	1473898-7				
	SPS		Gray	1473898-8				
	SPS		Gray	1473898-9				
	PBT		Natural	1-1473898-1				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

16 Position Vertical Header

Technical Features

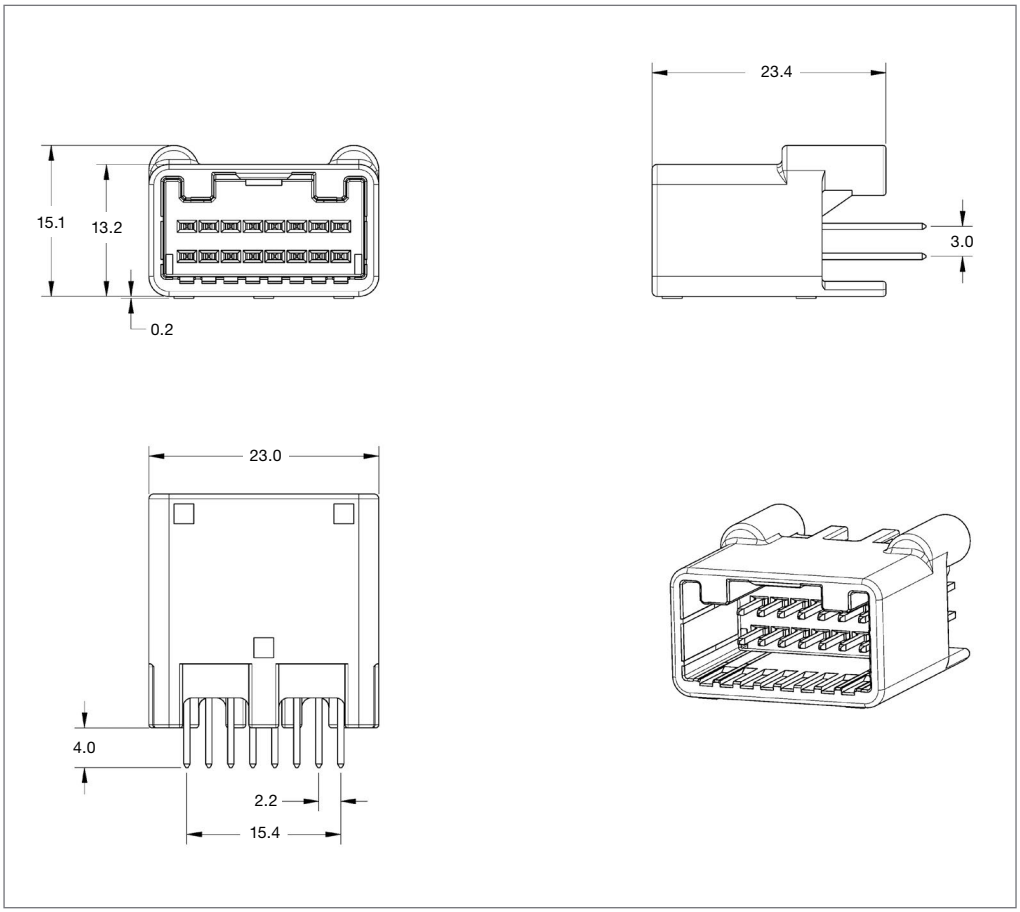
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-5668

Application Specification:
114-5250



16 Position Vertical Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
16	PBT	Neutral	Natural	1565476-1	–	Tube	1379665-5	1318386-1
			Black	1565476-2				
			Natural	1565476-4				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

24 Position Vertical Header

Technical Features

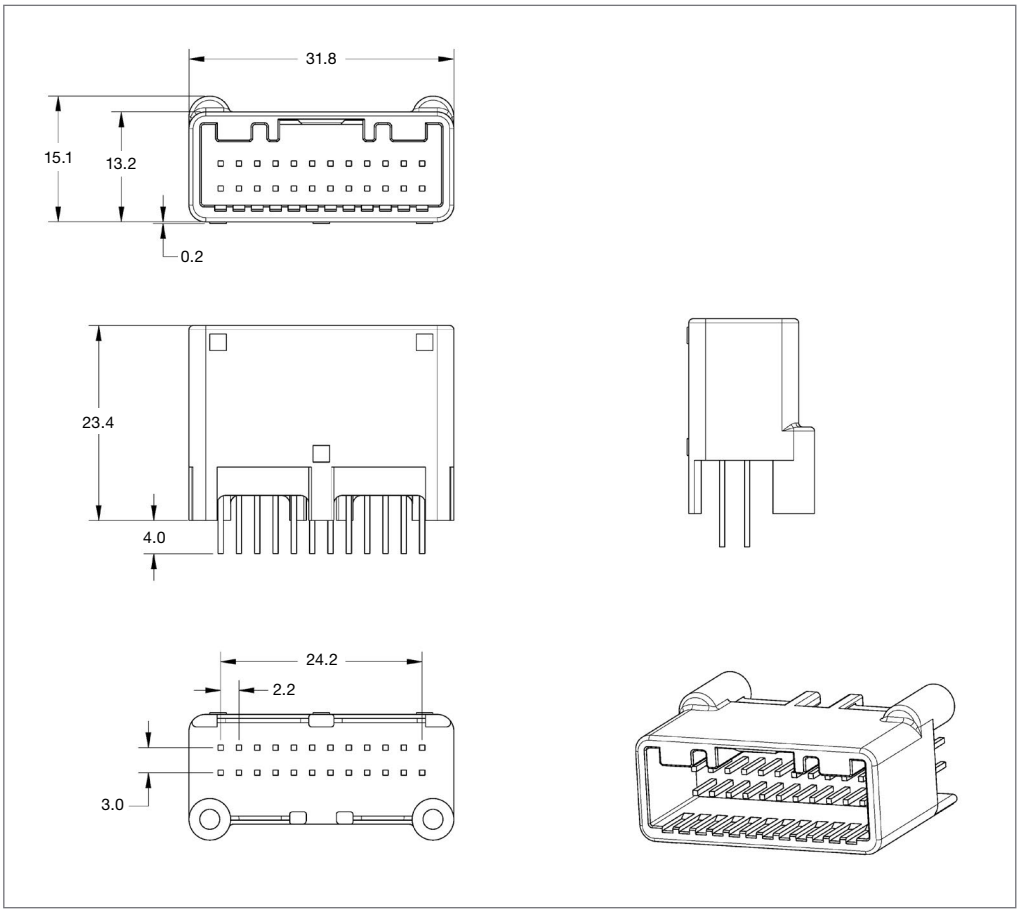
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-5668

Application Specification:
114-5250



24 Position Vertical Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
24	PBT	Neutral	Natural	1376111-1	–	Tube	1379668-5	1318917-1
	PBT		Natural	1376111-2				
	SPS		Natural	1376111-5				
	SPS		Natural	1376111-6				
	PBT		Natural	1376111-7				
	SPS		Black	1376111-8				
	SPS		Black	1376111-9				
	SPS		Natural	1-1376111-1				
	SPS		Black	1-1376111-3				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

40 Position Vertical Header

Technical Features

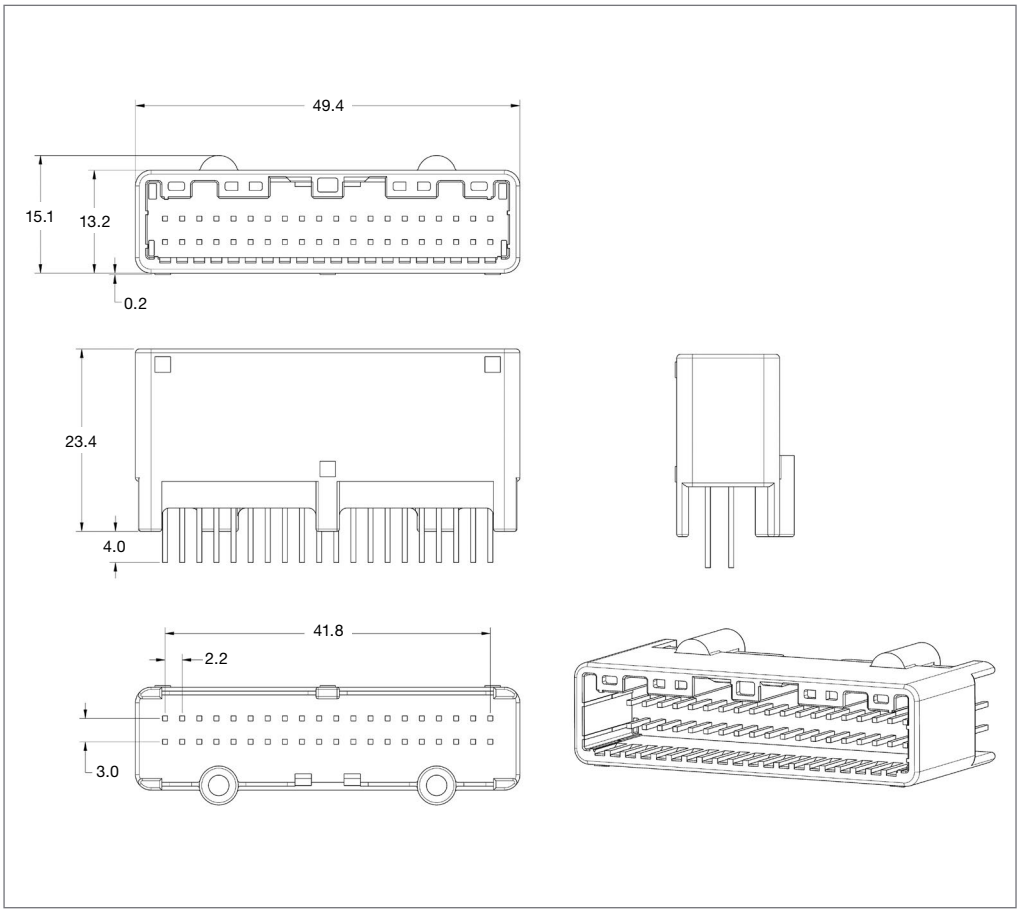
- Compact design with 2.2mm pitch
- Board fixation screw

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-5668

Application Specification:
114-5250



40 Position Vertical Header

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
40	PBT	Neutral	Natural	1376113-1	–	Tube	1379668-5	1318917-1
	PBT		Natural	1376113-2				
	SPS		Natural	1376113-5				
	PBT		Natural	1376113-6				
	SPS		Natural	1376113-7				
	PBT		Natural	1376113-8				
	SPS		Natural	1376113-9				
	SPS		Black	1-1376113-1				
	PBT		Natural	1-1376113-3				

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

8 Position SMD Header – Vertical

Technical Features

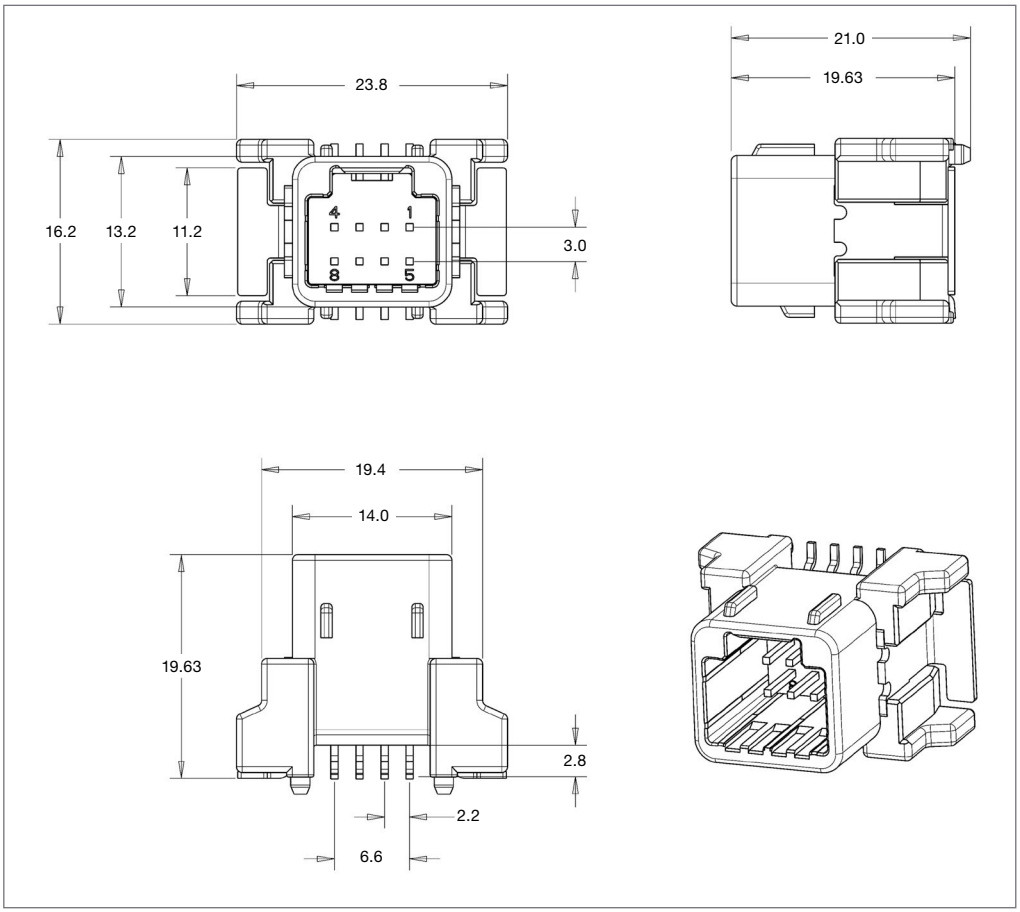
- Compact design with 2.2mm pitch
- Designed for Reflow Leadfree Process
- Board fixation screw
- Locating Pin (PCB Mechanical Coding)

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-78295

Application Specification:
411-78145



8 Position SMD Header – Vertical

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
8	PPS	Neutral	Black	1939403-1	–	Tube	1379659-5	1376352-1
				1939403-2	–	Tube		
				1939403-3	–	Tray		

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

16 Position SMD Header – Vertical

Technical Features

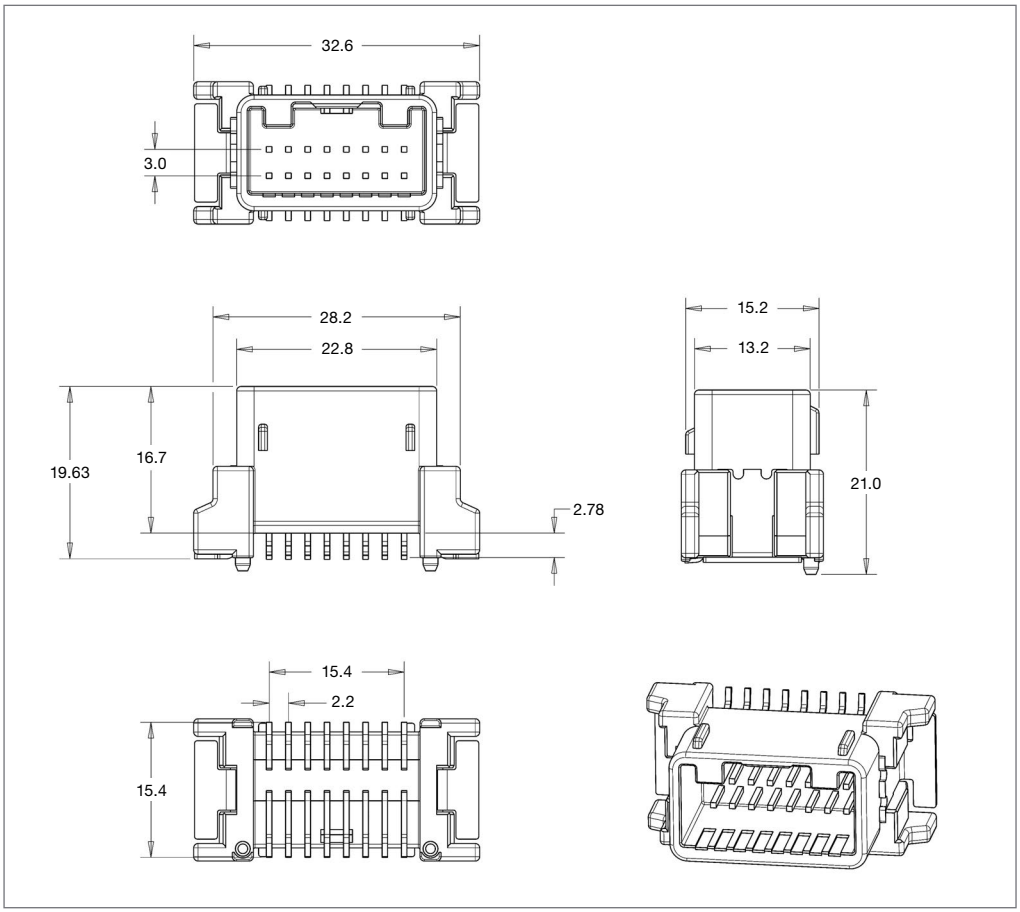
- Compact design with 2.2mm pitch
- Designed for Reflow Leadfree Process
- Board fixation screw
- Locating Pin (PCB Mechanical Coding)

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-78295

Application Specification:
411-78145



16 Position SMD Header – Vertical

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
16	PPS	Neutral	Black	1717396-1	–	Tube	1379665-5	1318386-1
				1717396-2	–	Tube		
				1717396-3	–	Tray		

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

24 Position SMD Header – Vertical

Technical Features

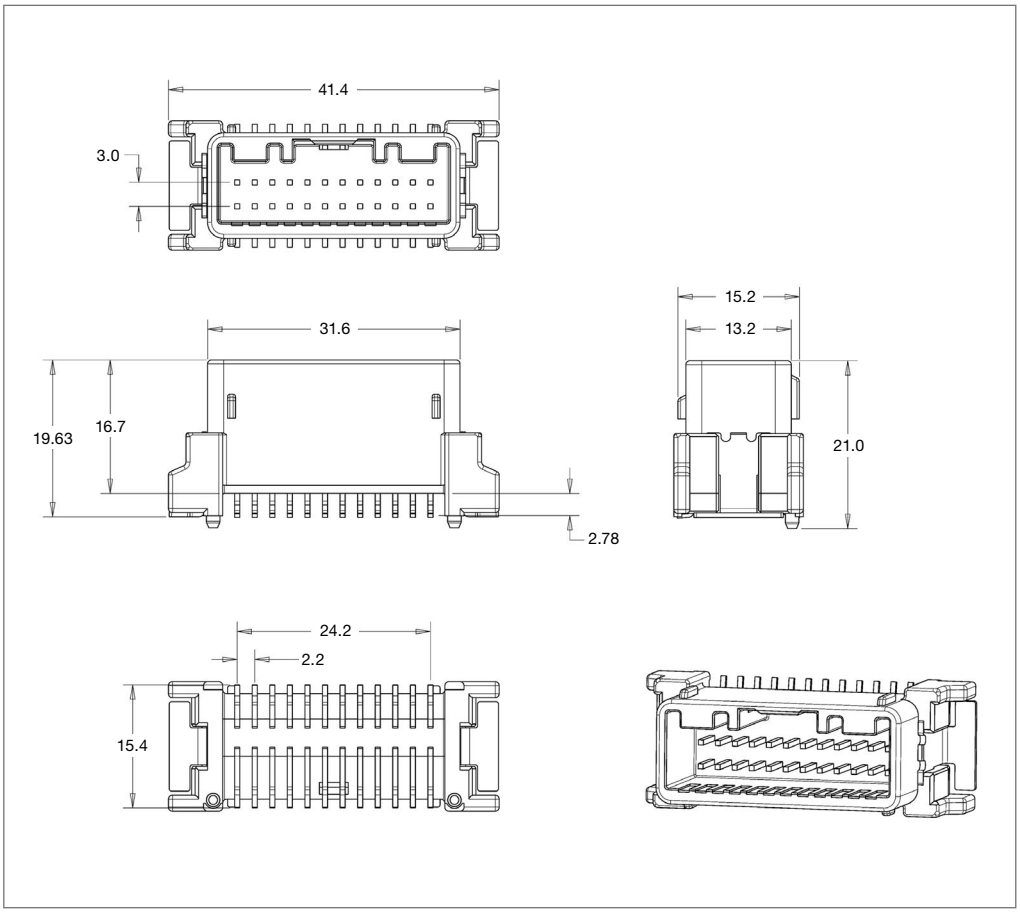
- Compact design with 2.2mm pitch
- Designed for Reflow Leadfree Process
- Board fixation screw
- Locating Pin (PCB Mechanical Coding)

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-78295

Application Specification:
411-78145



24 Position SMD Header – Vertical

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
24	PPS	Neutral	Black	1717394-1 1717394-2	–	Tube	1379668-5	1318917-1

This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

40 Position SMD Header – Vertical

Technical Features

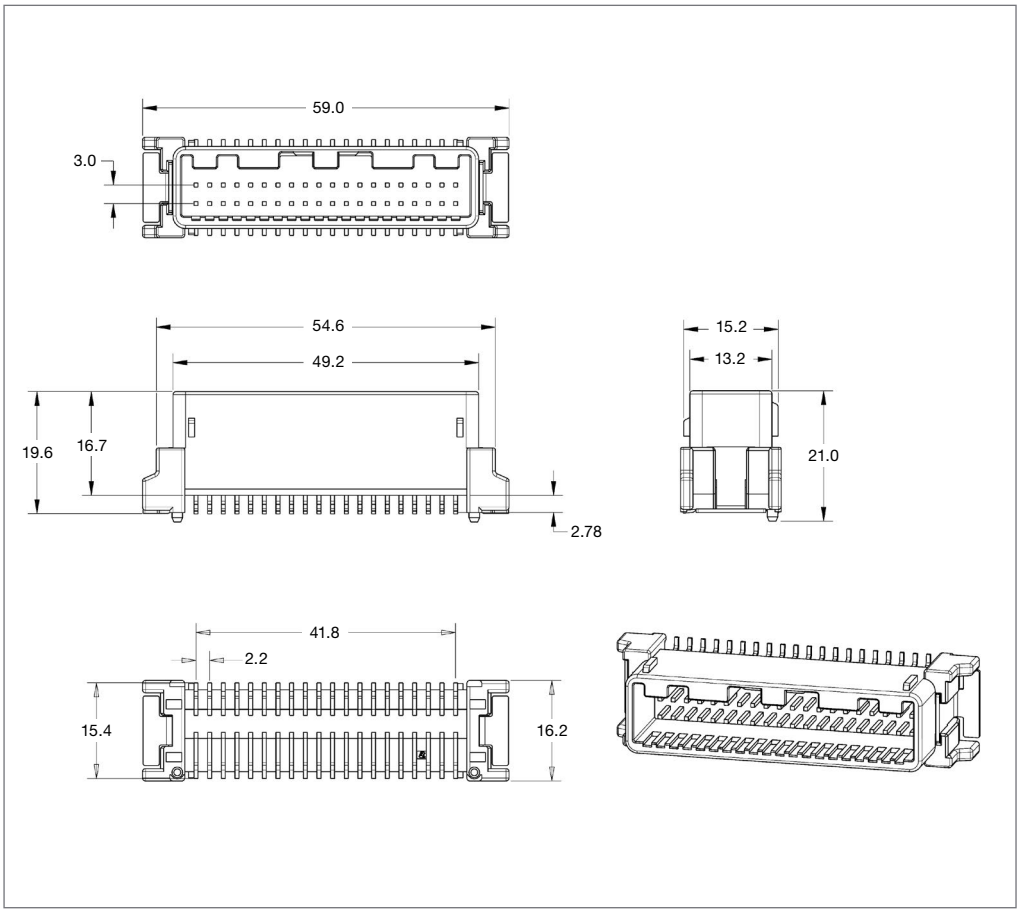
- Compact design with 2.2mm pitch
- Designed for Reflow Leadfree Process
- Board fixation Solder peg
- Locating Pin

Housing Material:
See table

Pin Material:
Brass

Product Specification:
108-78295

Application Specification:
411-78145



40 Position SMD Header – Vertical

No. of Positions	Housing Material	Keying Options	Housing Color	Part Numbers				
				Header	Package Quantity	Packaging	Mating Receptacle Housing for use in EMEA	for use in Asia
40	PPS	Neutral	Black	1747642-1 1747642-2	–	Tube	1379671-5	1318389-1

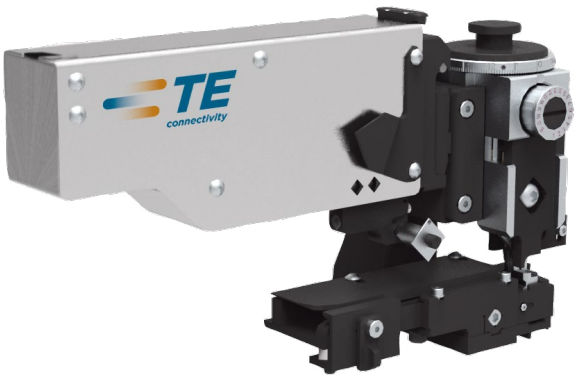
This header will mate with both the EMEA and Asia receptacle. Please review receptacle features prior to selection.

Engineering Notes





Images representative of tool type only.



APPLICATION TOOLING AND EQUIPMENT

FOR TH 025 CONNECTOR SERIES

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- Brochures and more detailed flyers for the specialised equipment.
- It's quick, easy and more importantly the latest and most up to date information is available online.

Regional Assistance

www.te.com/support-center

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