

TH 025 CONNECTOR SERIES

for the
Automotive Industry



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High density in limited spaces



Product Features

- TH025 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 special contact design to resist fretting corrosion effectively while employing a lower contact force. As a result, the low insertion force of TH025 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.
- TH025 connectors feature a pitch of just 2.2mm, compared to the current standard pitch of 2.54mm.
- TH025 connector series have been originally designed in Japan. An European version has been implemented, in order to fulfill 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

TH 025 Connector Series

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 0.5mm²,
specific 0.75mm² application possible

Contact Finish
– for Receptacle
Tin and gold plating
– for Tab
Tin plating

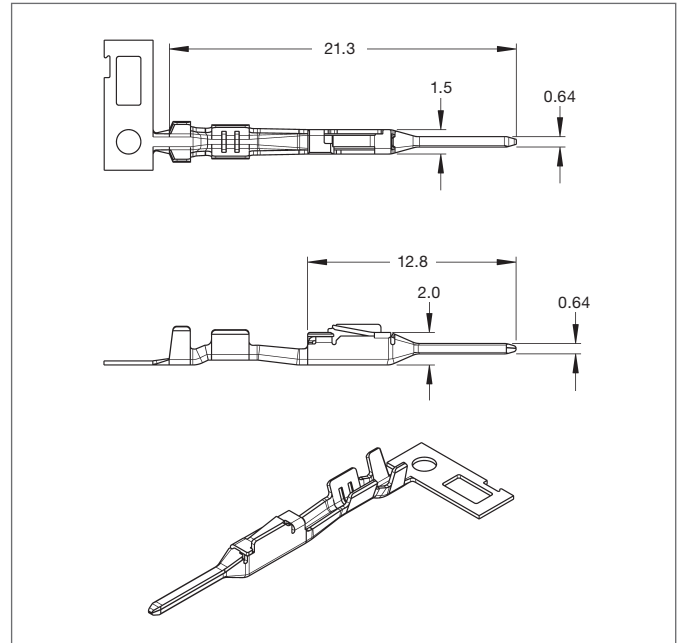
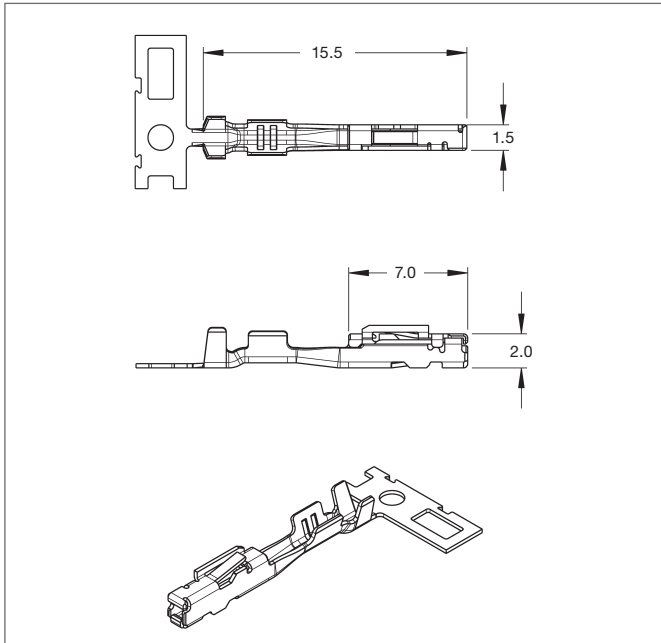
Material
– for Receptacle
Copper Alloy
– for Tab
Brass

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

Contact Retention Force
100 N (retainer block)

Product Specification
108-5668 & 108-15299

Application Specification
114-5250 & 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 (0.5mm²)

**)0.75mm² – Application depending on wire function

♦) Depending on the assembly of contact and housing

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

Receptacle Housings

All products are 2 row with the exception of the 4P which is a single row

Technical Features

- Compact design with 2.2mm pitch
- Two parts (housing + retainer block = 1 piece)
4P only – is single piece with hinged Lid

Temperature range	-40° C up to +105° C
Secondary lock	Housing retainer block
Dielectric strength	1000 V AC 1min
Insulation resistance	> 100 MΩ
Housing material	PBT
Connector mating force	Max 60 N
Product specification	108-15299
Application specification	411-15672

Tab Housings

All products are 2 row with the exception of the 4P which is a single row

Technical Features

- Compact design with 2.2mm pitch
- Two parts (housing + retainer block = 1 piece)
4P only – is single piece with hinged lid
8P only – Japanese version

Temperature range	-40° C up to +105° C
Secondary lock	Housing retainer block
Dielectric strength	1000 V AC 1min
Insulation resistance	> 100 MΩ
Housing material	PBT
Connector mating force	Max 60 N
Product specification	108-15299 / 108-5787 ^{*)}
Application specification	411-15672 / 411-78011 ^{*)}

^{*)} Japanese version

Receptacle Housing	
Rec 4P 1 row	1379658-1
	1379658-2
	1379658-3
	1379658-4
	1-1379658-1
Rec 8P 2 row	1379659-1
	1379659-2
	1379659-3
	1379659-4
	1379659-5
Rec 12P 2 row	1379662-1
	1379662-2
	1379662-3
	1379662-4
	1379662-5
Rec 16P 2 row	1379665-1
	1379665-2
	1379665-3
	1379665-4
	1379665-5
Rec 24P 2 row	1379668-1
	1379668-2
	1379668-3
	1379668-4
	1379668-5
Rec 40P 2 row	1379671-1
	1379671-2
	1379671-3
	1379671-4
	1379671-5

Tab Housing	
Tab 4P 1 row	1379674-1
	1379674-2
	1379674-3
	1379674-4
	1-1379674-1
Tab 8P 2 row	1565804-1
	1565804-2
Tab 12P 2 row	1379675-1
	1379675-2
	1379675-3
	1379675-4
	1379675-5
Tab 16P 2 row	1379678-1
	1379678-2
	1379678-3
	1379678-4
Tab 24P 2 row	1379681-1
	1379681-2
	1379681-3
	1379681-4

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LITERATURE

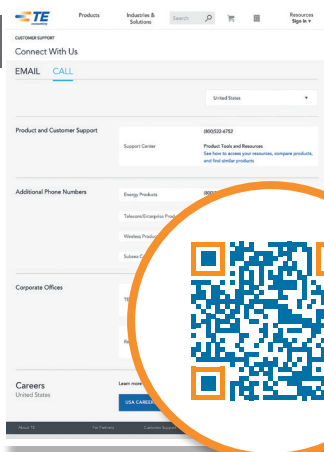
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