



Connectors > D-Shaped Connectors > D-Sub Connectors > PCB D-Sub Connectors



Connector & Housing Type: **Plug**
Connector System: **Cable-to-Board**
Number of Positions: **9**
Centerline (Pitch): **2.74 mm [.108 in]**
Number of Rows: **2**

Features

Product Type Features

Grounding Indents	Without
Grounded	No
Grounding Straps	Without
Footprint	14.99 mm[.59 in]
Shell Type	All Plastic
Connector & Housing Type	Plug
Connector System	Cable-to-Board
D-Sub Shell Size	1
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board
Product Type	Connector

Configuration Features

Number of Positions	9
Number of Rows	2
PCB Mount Orientation	Right Angle
Preloaded	Yes

Body Features

Plastic	Yes
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Insert Material	Zinc
Connector Profile	Standard
Post Size	.66 mm[.026 in]

Contact Features

Contact Mating Area Underplating Material	Palladium Nickel
Contact Mating Area Plating Material	Gold, Gold Flash
Contact Underplating Material	Nickel
PCB Contact Termination Area Plating Material	Tin-Lead
Contact Base Material	Brass
Contact Shape & Form	Round
Contact Current Rating (Max)	1.2 A, 2 A, 3.1 A
	30 µin

Termination Features

Grounding Clips	Without
Termination Method to Printed Circuit Board	Through Hole - Solder
Termination Post Length	3.18 mm[.125 in]

Mechanical Attachment

Threaded Insert Material	Zinc
Threaded Insert Plating Material	Clear Chromate
Panel Mount Feature	Without
PCB Mount Retention	With
PCB Mount Retention Type	Mounting Hole
Mating Retention	With
Mating Retention Type	Threaded Inserts
Connector Mounting Type	Board Mount
Mounting Hole Diameter	3.18 mm[.125 in]

Housing Features

Centerline (Pitch)	2.74 mm[.108 in]
Housing Material	Nylon GF, Polyester GF
Housing Color	Black

Dimensions

Row-to-Row Spacing	2.84 mm[.112 in]
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PCB Thickness (Recommended)	2.36 mm[.093 in]
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Usage Conditions

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

Circuit Application	Signal
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Industry Standards

Approved Standards	UL E28476
UL Flammability Rating	UL 94V-0

Packaging Features

Packaging Method	Package
Packaging Quantity	140

Other

Comment	Plugs are preloaded with size 20 DF posted pin contacts
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Product Compliance

For compliance documentation, visit the product page on [TE.com](#)>

EU RoHS Directive 2011/65/EU	Not Compliant
EU ELV Directive 2000/53/EC	Not Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JAN 2020 (205) Candidate List Declared Against: JAN 2020 (205) Pb (13% in Component Part)
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JAN 2020 (205) Candidate List Declared Against: JAN 2020 (205)
Halogen Content	BFR/CFR/PVC Free, but Br/Cl >900 ppm in other sources.
Solder Process Capability	Wave solder capable to 265°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



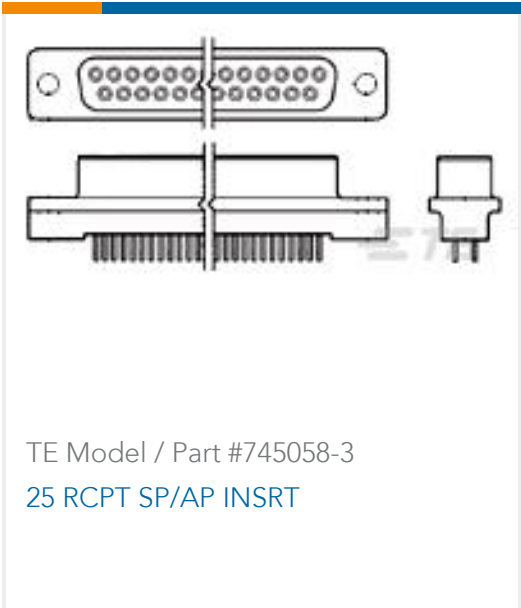
limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration 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 Regulations, TE's information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) 'Guidance on requirements for substances in articles'(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of 'complex object', the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA "Guidance on requirements for substances in articles" (June 2017, version 4.0) and will be updating its statements accordingly.

Compatible Parts

TE Model / Part # 3-1393483-8 V42254A1115B209=SUB D FEDERLEI	TE Model / Part # 1658614-4 09 POS HDF RCPT, AP, LEAD FREE	TE Model / Part # 745201-7 09 HDE AP RECEPT, LEAD FREE	TE Model / Part # 1658609-4 09 POS HDF RCPT, AP, LEAD FREE

Customers Also Bought

TE Model / Part #5747460-5 HD-20 RCPT 15P RA 590 FFSCRLK	TE Model / Part #5536623-1 2MMFB,ASY,008,PWR,HDR,SL,4.25	TE Model / Part #414907-1 JACK,PCB,75 OHM,NC	TE Model / Part #5520242-2 MJ,R/A,FLANGE,6P
TE Model / Part #1-641191-0 10P MTA100 CONN ASSY WHT 24AWG	TE Model / Part #499913-6 026 UNIV HDR RA 4S 15DP STD L2	TE Model / Part #1-641215-1 11P MTA100 HDR ASSY FL/ST 30AU	TE Model / Part #5-104450-7 08 MTE HDR SRST LATCH W/HLDWN



Documents

Product Drawings

[09 APFL PLUG RA 590 \(IN\)](#)

English

CAD Files

Customer View Model

[ENG_CVM_CVM_747467-4_J.2d_dxf.zip](#)

English

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_747467-4_J.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_747467-4_J.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

Product Environmental Compliance

[REACH Substance Communication Document](#)

English

Agency Approvals

[UL Report](#)

English