Superseal 1.0 Connector Overview

The Superseal 1.0 mm connectors are designed to meet the increasing need for dependable printed circuit board applications in harsh environments. The Superseal headers are available with straight or right-angle pins. Various locking latch options and keying configurations are available.

APPLICABLE PRODUCT DOCUMENTATION

Additional documentation is available for assistance with Superseal 1.0 products. The following TE document numbers may be helpful:

1308072-2 (Catalog Section)
108-78140 (Product Specification)
114-78011 (Application Specification)

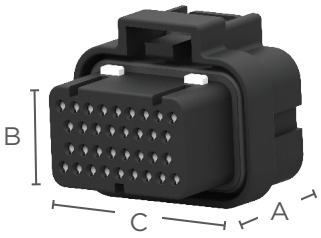
SUPERSEAL 1.0 CONNECTOR PERFORMANCE SPECIFICATIONS

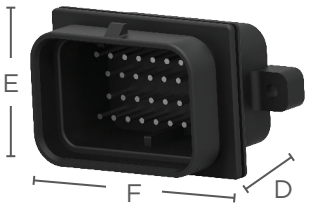
Current:	Up to 15 amps
Temperature:	Operating at temperatures -40°C to +125°C
Durability:	After cap housing is connected, the plug housing is mated and then 78.4 N force is applied in a rocking motion. 25 test cycles.
Insulation Resistance:	100 megohms minimum. Test between adjacent contacts and between contact and earth with insulation resistance meter of 500 volts DC.
Immersion:	Per JIS D0203
Random Vibration:	Tested in each of three mutually perpendicular axis. See Fig 8 in product document 108-78140.
Dielectric Withstanding Voltage:	Insulation does not breakdown at 1000 volts AC or 1600 volts DC for duration of 1 minute between contacts and between contact and earth.
Voltage:	250 volts AC, DC

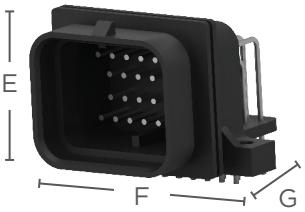
MATERIAL SPECIFICATIONS

Grommet:	Silicone rubber
Housing:	Thermoplastic
TPA:	Thermoplastic polyester

DIMENSIONS



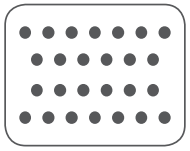




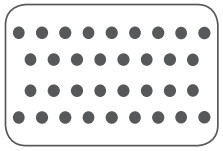
	Superseal 1.0 Plug Housing				Superseal 1.0 Pin Header		
Cavity	**Overall Length A**	**Overall Height B**	**Overall Width C**	**Overall Length Vertical D**	**Overall Height E**	**Overall Width F**	**Overall Length 90° G**
26	1.26 (32.1)	1.36 (34.5)	1.26 (32.1)	1.14 (29.0)	1.23 (31.4)	1.55 (39.5)	1.44 (36.5)
34	1.26 (32.1)	1.49 (38.0)	1.50 (38.2)	1.14 (29.0)	1.23 (31.4)	1.79 (45.5)	1.44 (36.5)
60	-	-	-	-	1.23 (31.4)	3.07 (78.0)	1.44 (36.5)

Dimensions are for reference only.

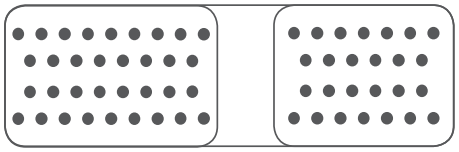
CONFIGURATIONS



26 Positions
26 size 1.0 mm



34 Positions
34 size 1.0 mm



60 Positions
60 size 1.0 mm

ORDERING INFORMATION

Position	Pin Header	Plug Housing	Keying Type	Locking
26	9-6437287-8	3-1437290-7	1 (4 row)	Upper
	9-6437287-9	3-1437290-8	2 (4 row)	Upper
	6473423-1	1473416-1	3 (4 row)	Upper
	6473423-2	1473416-2	4 (4 row)	Upper
	5-6447223-0	3-1437290-7	1 (4 row)	Lower
	6437288-4	3-1437290-8	2 (4 row)	Lower
	2-6437285-8	2-1437285-2	1 (4 row)	Double
	2-6437285-9	1-1447232-7	2 (4 row)	Double
	6437288-6	3-1437290-7	1 (4 row, vertical)	Upper
	6473418-1	3-1437290-8	2 (4 row, vertical)	Upper
	6473418-2	1473416-1	3 (4 row, vertical)	Upper
	6473711-1	1473712-1	1 (2 row)	Upper
	6473711-2		1 (2 row)	Lower
34	6437288-1	4-1437290-0	1 (4 row)	Upper
	6437288-2	4-1437290-1	2 (4 row)	Upper
	2-6437285-5	4-1437290-0	1 (4 row)	Lower
	2-6437285-6	4-1437290-1	2 (4 row)	Lower
	3-6437285-0	2-1437285-3	1 (4 row)	Double
	3-6437285-1	3-1437290-9	2 (4 row)	Double
	2-6447232-3	4-1437290-0	1 (4 row, vertical)	Upper
	2-6447232-4	4-1437290-1	2 (4 row, vertical)	Upper
60	6437288-3	3-1437290-7 (26P), 4-1437290-0 (34P)	1 (4 row)	Upper
	6473427-1	1473416-1 (26P), 4-1437290-1 (34P)	2 + 3 (4 row)	Upper
	6437288-5	3-1437290-7 (26P), 4-143790-0 (34P)	1 (4 row)	Lower
	3-6437285-2	2-1437285-2 (26P), 2-1437285-3 (34P)	1 (4 row)	Double

Contacts

The Superseal 1.0 mm connectors commonly use the AMP Superseal double spring, stamped & formed contact system.

1.0 MM CONTACT PERFORMANCE SPECIFICATIONS

Durability
25 cycles, per “Kojiri” (rocking motion) durability test

Current Rating
Up to 15 amps, consult TE product specification 108-78140

Contact Retention (between contact and housing)
1.0mm ≥ 58.8N

Crimp Tensile Strength

Contact Size	Tensile Strength
.5mm²	≥ 88.2N
.85 mm²	≥ 127.4N
1.25 mm²	≥ 176.4N

1.0 MM STAMPED & FORMED CONTACTS FOR SUPERSEAL 1.0

Stamped & Formed Receptacles - 1.0 mm

Size	Receptacle Strip Form	Wire Size (mm²)	Insulation Diameter (mm)	Finish
1.0 mm	3-1447221-4	0.5	1.6-2.2	Copper alloy Gold over nickel (contact part), Tin over Nickel (crimp area)
	3-1447221-3	.75-.85	1.6-2.4	
		1.25	1.9-2.2	

SEALING PLUGS

Open cavities provide pathways for contaminates to enter the connectors. To maintain seal integrity, any unused cavity must be filled with the appropriate size sealing plug.

Contact Size	Color	Part Number
1.0 mm	White	4-1437284-3

Tooling

Tools are specific to the contact style. To create a proper crimp and achieve the highest performance specifications, contacts must be crimped with the recommended tooling.

HAND TOOLS FOR 1.0 MM CONTACTS

Receptacle P/N	Tool P/N	Description
3-1447221-3 3-1447221-4	1454509-1	CERTI-CRIMP straight action hand tool with fixed dies

AUTOMATED TOOLING FOR 1.0 MM CONTACTS

Receptacle P/N	Applicator P/N	Description
3-1447221-3 3-1447221-4	2151705-1	OCEAN end feed applicator with mechanical feed
	2151705-2	OCEAN end feed applicator with pneumatic feed

Note: Applicators with additional feed styles are available, contact your representative