

STL 1550

11877.1

STL 1550/3.5/2V 2P PCB VERT

- Impulse voltage tolerance of 2.5 kV
- Flame-retardant polyamide 6.6 housing
- -30 and 105 °C



PRODUCT DESCRIPTION

The CONTA-CLIP STL 1550 series consists of straight male pin headers designed for secure PCB interconnections, offering a 3.81 mm pitch and available in multiple pole counts, such as the 15-pole version. Each pin has a 0.8 mm diameter and requires a 1.2 mm drill hole, with the housing dimensions tailored for compact installation: 9.2 mm in height, 6.9 mm in length, and a total width of 67.54 mm for the 15-pole variant. Rated at 10 A and 160 V with an impulse voltage tolerance of 2.5 kV, the STL 1550 meets Overvoltage Category III and Pollution Degree 3 standards, ensuring dependable performance in demanding environments. The connector is built from copper alloy pins and a flame-retardant polyamide 6.6 housing (UL 94 V-0), featuring excellent glow-wire resistance and a CTI value of 600. It supports up to 100 plug-in cycles, operates between -30 and 105 °C, and is designed for wave-soldering processes with recommended temperatures of 265 °C for 3–4 seconds. Approvals from UL, cUL, and VDE underline its compliance with international safety requirements.

The STL 1550 is widely used in industrial automation, control panels, and machinery, where reliable PCB-to-PCB or PCB-to-wire connections are crucial. Its vertical design with compact pitch makes it ideal for space-constrained applications, while its current and voltage capacity allow it to handle both signal and low-power transmission in a single connector. The robust thermal and flame resistance make it suitable for systems exposed to high temperatures, such as power electronics or motor drives, and the modularity supported by its 100 plug-in cycles simplifies servicing and replacement. By combining safety certifications, mechanical durability, and easy integration with automated soldering, the STL 1550 provides an efficient and cost-effective solution for engineers looking to balance reliability and compact design in electrical systems.

TECHNICAL DATA

GENERAL DATA

Type	Header
Pitch	3.5 mm
Colour	Green
Number of poles	2
Approvals	UL, cUL, VDE

RATINGS

Rated current	10 A
Rated voltage	160 V
Rated impulse voltage	2.5 kV
Overvoltage category	III
Contamination degree	3

DIMENSIONS

Length	7 mm
Width	8.4 mm
Height	9.2 mm
Width left	2.45 mm
Width right	2.45 mm
Drillhole diameter	1.2 mm
Diameter of the connection pin	0.8 mm
Length of pin	3.4 mm

CONNECTION DATA

Connector type/principle	Pin header
Connector version	Fixed
Number of plugin rows	1

MATERIALS

Housing material	Polyamide 6.6
Flammability class	UL94-V0
Operating temperature from	-30 °C
Operating temperature to	105 °C
Contact pin	Copper alloy

APPROVALS

UL test standard	UL 1059
Rated voltage UL	300 V
Rated current UL	10 A
cUL test standard	CSA 22.2 No.158
Rated voltage cUL	300 V
Rated current cUL	10 A
VDE test standard	DIN EN 61984
Rated voltage VDE	160 V
Rated current VDE	10 A

Plug-in cycles acc. to standard	100
Recommended wave solder duration max	4 s
Recommended wave solder duration min	3 s
Recommended wave soldering temperature	265 °C

Tariff code	85366990
Pack size	50
Weight	0.4 g
Angle circuit board / contact	90° (vertically upwards)
Country of origin	QU
Current creepage resistance	CTI 600
Glow wire flammability index (GWFI)	GWFI 850
Glow wire ignition temperature (GWIT)	GWIT 775
GWFI after-glow time	30 s
GWIT exposure time	5 s
Insulation resistance	1*10 ¹³ Ω x cm

