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STL 970

11759.1
STL 970/2/5,08-V GN

- Flame resistant polybutylene terephthalate
- male pin plug in connection
- up to 12 A at 250 V

PRODUCT DESCRIPTION

The STL 970/21/5.08-V GN is a male pin plug-in connector block designed for printed-circuit-board mounting. In this 21-pole variant, it features a standard 5.08 mm pitch, a total width of approximately 109.22 mm, pin diameter of 1 mm with 1.4 mm drill holes, and a 3.9 mm pin length. The housing is made from flame-resistant polybutylene terephthalate (UL-94 V-0), providing high mechanical and thermal resilience. Rated for up to 12 A at 250 V (impulse voltage 4 kV, overvoltage category III), it offers contaminant resistance degree 3 and PC insulation resistance of 10^{13} Ω·cm. Operational temperature spans –30 °C to +105 °C, with a CTI (comparative tracking index) of 175. It supports at least 100 plug-in cycles and is suitable for wave-soldering (recommended 3–4 s at 265 °C). The connector carries UL, VDE, and cUL approvals, including UL 1059, CSA 22.2 No. 158, and EN 61984 specifications.
The STL 970 series is ideally suited for industrial control panels, automation systems and interface modules where reliable, high-current PCB connections are required, especially in environments exposed to mechanical stress or temperature variation. The modular nature, different pole counts, colours (such as green for protective earth), and pin configurations, allows engineers to integrate it into multi-connector terminals or relay bases easily. Its flame-resistant housing and high impulse voltage rating make it safe for power electronics applications, power supplies, and transformer connections in factory automation, energy or process-control installations. The robust approvals and soldering resilience also support assembly in high-reliability manufacturing and infrastructure equipment.

TECHNICAL DATA

GENERAL DATA

Type	Header
Pitch	5.08 mm
Colour	Green
Number of poles	2
Approvals	UL, cUL, VDE

RATINGS

Rated current	12 A
Rated voltage	250 V
Rated impulse voltage	4 kV
Overvoltage category	III
Contamination degree	3

DIMENSIONS

Length	23.5 mm

Width	12.7 mm
Height	22 mm
Width left	2.54 mm
Width right	5.08 mm
Drillhole diameter	1.4 mm
Diameter of the connection pin	1 mm
Length of pin	3.9 mm

CONNECTION DATA

Connector type/principle	Pin header
Connector version	Fixed
Number of plugin rows	2

MATERIALS

Housing material	Polybutylene terephthalate
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	15 A
cUL test standard	CSA 22.2 No.158
Rated voltage cUL	300 V
Rated current cUL	15 A
VDE test standard	DIN EN 61984
Rated voltage VDE	250 V
Rated current VDE	12 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	2.6 g
Angle circuit board / contact	90° (vertically upwards)
Country of origin	QU
Current creepage resistance	CTI 175
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