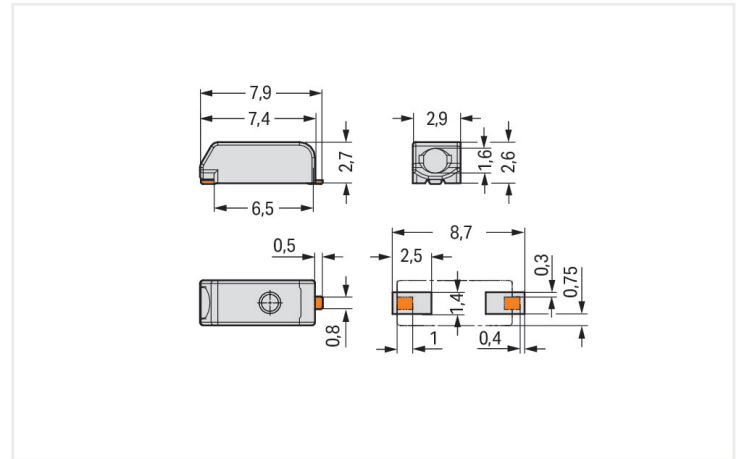
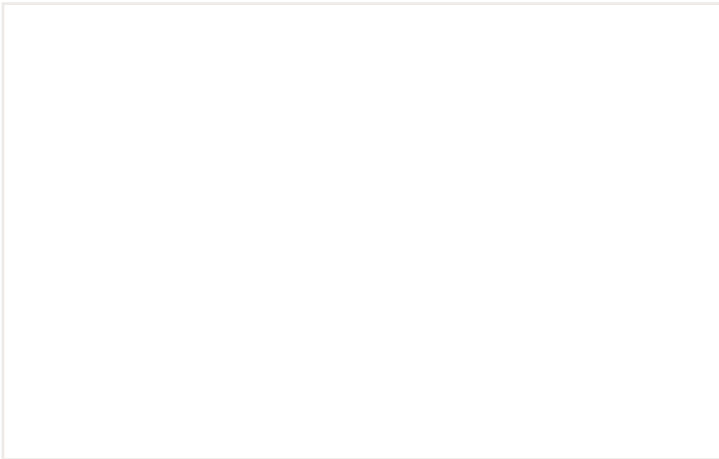


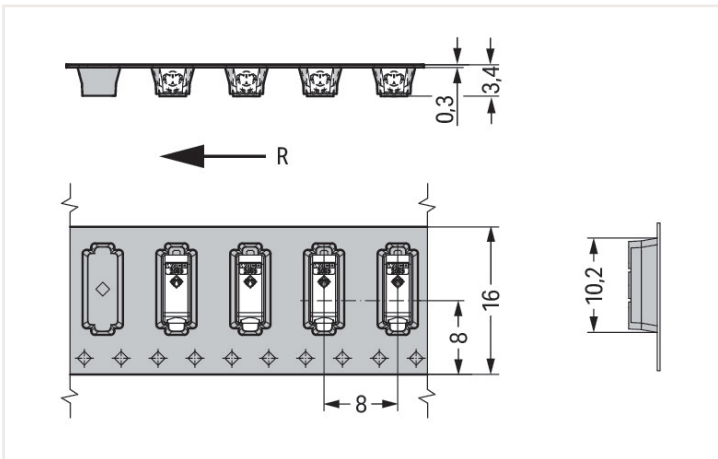
Data sheet | Item number: 2059-301/998-403

SMD PCB terminal block; 0.5 mm²; Pin spacing 3 mm; 1-pole; PUSH WIRE®; in tape-and-reel packaging; 0,50 mm²; white

<https://www.wago.com/2059-301/998-403>



Dimensions in mm



Dimensions in mm

R = feed direction

- SMD PCB terminal blocks with PUSH WIRE® connection technology
- Push-in termination of solid conductors
- Easy conductor removal via operating tool
- Just 2.7 mm tall
- Assemble terminal blocks without pole loss
- Available in tape-and-reel packaging for automated assembly

Notes

Note

Application notes:

Suitable for lead-free, reflow-soldering profiles per DIN EN 61760-1 and IEC 60068-2-58 up to max. 260°C peak temperature. Due to application-specific variables (component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.

Recommendation

Recommendation for stencil:

150 µm material thickness; Pattern layout identical to solder pad layout

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	63 V
Rated impulse voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated impulse voltage (III/2)	2.5 kV
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	3 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

Ratings per UL

Rated voltage (UL 1977)	600 V
Rated current UL 1977	3 A

Connection data

Connection points	1
Total number of potentials	1
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	PUSH WIRE®
Actuation type	Operating tool
Solid conductor	0.14 ... 0.34 mm ² / 26 ... 22 AWG
Note (conductor cross-section)	For conductors (26 AWG) that are not rigid enough, the clamping unit must be opened using an operating tool.
Strip length	4 ... 5.5 mm / 0.16 ... 0.22 inches
Conductor connection direction to PCB	0°
Pole number	1

Connection 2

Solid conductor 2	0.5 mm ² / 20 AWG
Note (conductor cross-section) 2	No reconnection of smaller conductor cross-sections (0.5 mm ² /20 AWG)
Strip length 2	6 ... 7.5 mm / 0.24 ... 0.3 inches

Physical data

Pin spacing	3 mm / 0.118 inches
Width	2.9 mm / 0.114 inches
Height	2.7 mm / 0.106 inches
Depth	7.9 mm / 0.311 inches
Reel diameter of tape-and-reel packaging	330 mm
Tape width	16 mm

Plug-in connection

Plugging without loss of pin spacing	Yes
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PCB contact

PCB contact	SMD
Solder pin arrangement	over the entire terminal strip (in-line)
Number of solder pins per potential	2

Material data

Note (material data)	Information on material data can be found here
Color	white
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Copper alloy
Contact plating	Tin
Fire load	0.002 MJ
Weight	0.1 g

Environmental requirements

Limit temperature range	-60 ... +105 °C
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Commercial data

Product Group	33 (Printed Circuit)
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	31800 (2650) Stück
Packaging type	Box
Country of origin VKOrg Germany	CH
GTIN	4055143082679
Customs tariff number VKOrg Germany	85369010000

Approvals and certificates

General approvals



Approval	Standard	Certificate name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7819
CCA DEKRA Certification B.V.	EN 60947	71-111131
CCA DEKRA Certification B.V.	EN 60838	NTR NL-7720
KEMA/KEUR DEKRA Certification B.V.	EN 60838	71-106226
UL Underwriters Laboratories Inc.	UL 1977	E45171

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product
Compliance
2059-301/998-403



Documentation

Additional Information

Technical Section

03.04.2019

pdf

1949.09 KB



CAD/CAE-Data

CAD data

2D/3D Models
2059-301/998-403



CAE data

ZUKEN Portal
2059-301/998-403



1 Compatible products

1.1 Optional accessories

1.1.1 Board-to-board link

1.1.1.1 Board-to-board link



Item no.: 2059-901

Board-to-Board Link; Pin spacing 3 mm;
1-pole; Length: 15.3 mm; white



Item no.: 2059-901/018-000

Board-to-Board Link; Pin spacing 3 mm;
1-pole; Length: 17.5 mm; white



Item no.: 2059-901/021-000

Board-to-Board Link; Pin spacing 3 mm;
1-pole; Length: 20.5 mm; white

1.1.2 Tool

1.1.2.1 Operating tool



Item no.: 206-859

Operating tool; for 2059 Series; multico-
loured



Item no.: 2059-189

Operating tool; made of insulating materi-
al; for 2059 Series

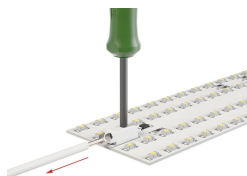
Installation notes

Conductor termination



Insert solid conductors via push-in termination.

Conductor termination



Easy conductor removal, e.g., via operating tool (Item No. 206-859) or "twist & pull" (max. 10 x, no reconnection of smaller conductors possible)