

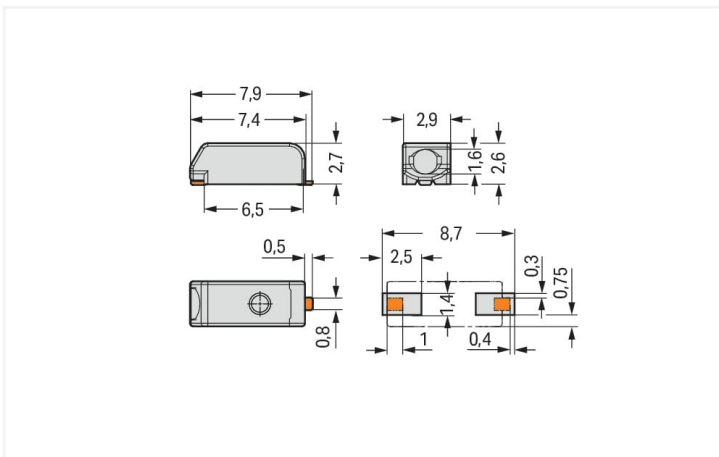
# Data Sheet | Item Number: 2059-301/998-403

SMD PCB terminal block; 0.5 mm<sup>2</sup>; Pin spacing 3 mm; 1-pole; PUSH WIRE®; in tape-and-reel packaging; 0,50 mm<sup>2</sup>; white

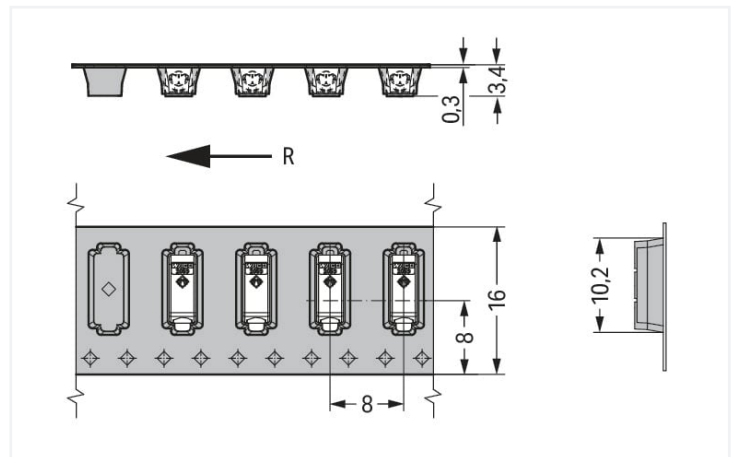
<https://www.wago.com/2059-301/998-403>



Color: ■ white



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	<p>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.</p> <p>Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.</p>
Recommendation	<p>Recommendation for stencil: 150 µm material thickness; Pattern layout identical to solder pad layout</p>

## Electrical data

Ratings per	IEC/EN 60664-1			Approvals per	UL 1977
Overvoltage category	III	III	II	Rated voltage	600 V
Pollution degree	3	2	2	Rated current	3 A
Nominal voltage	63 V	160 V	320 V		
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV		
Rated current	3 A	3 A	3 A		

## Connection data

Connection points	1	<b>Connection 1</b>	
Total number of potentials	1	Connection technology	PUSH WIRE®
Number of connection types	1	Actuation type	Operating tool
Number of levels	1	Solid conductor	0.14 ... 0.34 mm <sup>2</sup> / 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 <sup>2</sup> / 20 AWG
Note (conductor cross-section) 2	No reconnection of smaller conductor cross-sections (0.5 mm <sup>2</sup> /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

### 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)	<a href="#">Information on material specifications can be found here</a>
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 (SMT Terminal)
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) pcs
Packaging type	Box
Country of origin	CH
GTIN	4055143082679
Customs tariff number	85369010000

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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### Approvals / 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

2027.26 KB



## CAD/CAE-Data

### CAD data

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



### CAE data

ZUKEN Portal  
2059-301/998-403



## PCB Design

Symbol and Footprint  
via SamacSys  
2059-301/998-403



Symbol and Footprint  
via Ultra Librarian  
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; multicoloured

[Item No.: 2059-189](#)

Operating tool; made of insulating material; 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)