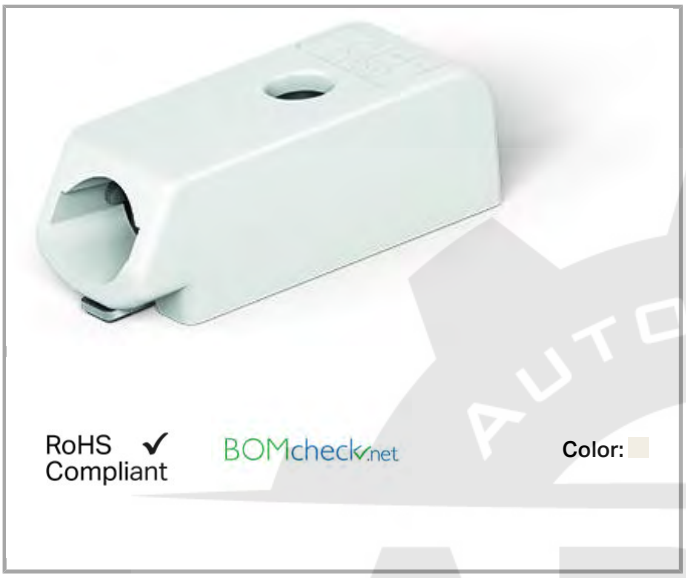
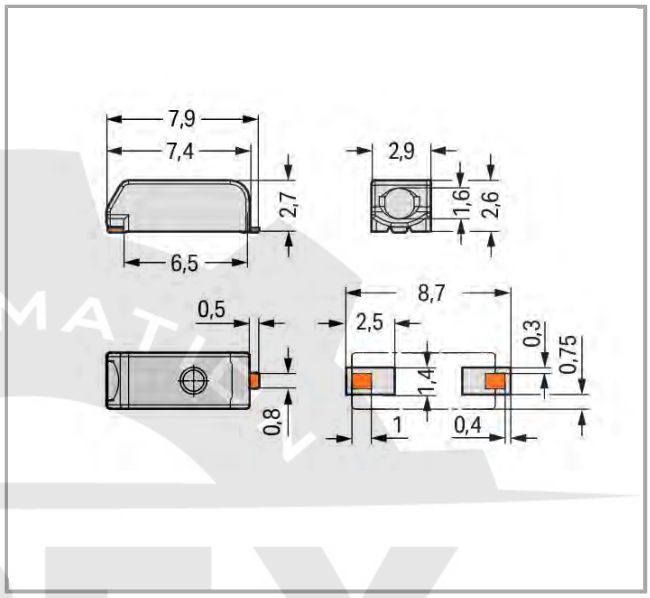
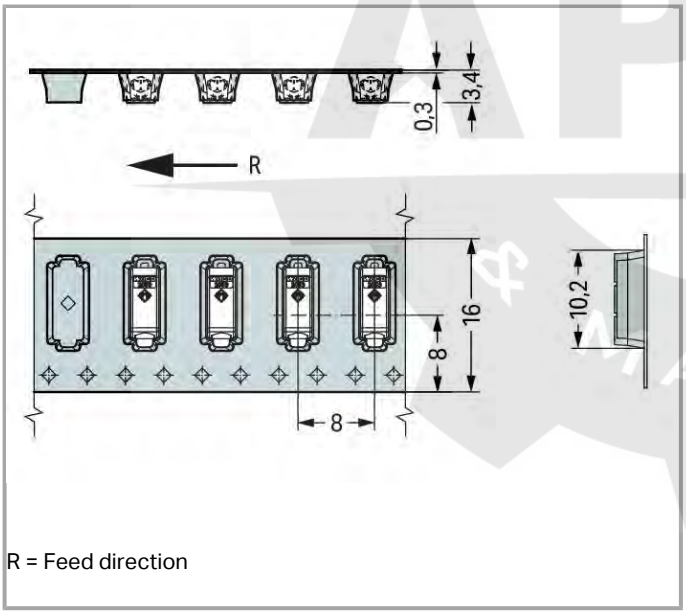
Data sheet | Item number: 2059-301/998-403

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

2059-301/998-403







R = Feed direction

Item description

- SMD PCB terminal blocks with PUSH WIRE® connection technology
- Push-in termination of solid conductors
- Easy conductor removal, e.g., via operating tool
- Just 2.7 mm tall
- Assemble terminal blocks without pole loss

- Available in tape-and-reel packaging for automated assembly

Note:

Application note:

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 customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Recommendation:

Recommendation for SMD stencil:

Material thickness, 150 µm. Pattern layout identical to solder pad layout.

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated 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
Rated voltage (II / 2)	320 V
Rated impulse voltage (II / 2)	2.5 kV
Rated current	3 A

Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	3 A

Connection data

Connection technology	PUSH WIRE®
Actuation type	Operating tool
Solid conductor	0.14 … 0.34 mm² / 26 … 22 AWG
Strip length	4 … 5.5 mm / 0.16 … 0.22 inch
Conductor entry angle to the PCB	0 °
Solid conductor (2)	0.5 mm² / 20 AWG
Note (conductor cross-section)	For conductors that are not rigid enough (26 AWG), the clamping unit must be opened using an operating tool.

Note (conductor cross-section) 2	No reconnection of smaller conductor cross-sections (0.5 mm² / 20 AWG)
Strip length (2)	6 … 7.5 mm / 0.24 … 0.3 inch
No. of poles	1
Total number of connection points	1
Total number of potentials	1
Number of connection types	1
Number of levels	1

Geometrical Data

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

PCB contact

PCB contact	SMD

Material Data

Color	white
Material group	I
Insulating material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
Fire load	0 MJ
Weight	0.079 g

Environmental Requirements

Limit temperature range	-60 … +105 °C

Commercial data

Product Group	33 (Printed Circuit)
Country of origin	CH
GTIN	4055143082679
Customs Tariff No.	85369010000

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7680
	CCA DEKRA Certification B.V.	EN 60838	NTR NL-7720
	CCA DEKRA Certification B.V.	EN 60947	2184363.01
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7428
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-103560
	KEMA/KEUR DEKRA Certification B.V.	EN 60838	71-106226

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1977	E45171

Compatible products

tools

	**Item no.: 2059-189** Operating tool; for 2059 Series SMD PCB Terminal Blocks; of insulating material	2059-189
	**Item no.: 206-859** Operating tool; for 2060 Series SMD Terminal Blocks	206-859

General accessories

	**Item no.: 2059-901** Board-to-Board Link; Pin spacing 3 mm; 1-pole; Length: 15.3 mm		2059-901
	**Item no.: 2059-901/018-000** Board-to-Board Link; Pin spacing 3 mm; 1-pole; Length: 17.5 mm	7018-000	2059-901
	**Item no.: 2059-901/021-000** Board-to-Board Link; Pin spacing 3 mm; 1-pole; Length: 20.5 mm	7021-000	2059-901

Downloads

Documentation

Additional Information

	pdf 3.6 MB	Download

CAD/CAE - Smart Data

CAD data

3D Download 2059-301/998-403	URL	Download

Subject to changes.