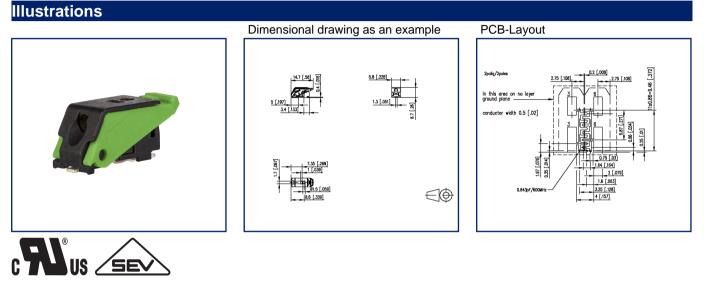
#### Data sheet SM99S01VBNN03G7 green

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#### P/N SM99S01VBNN03G7

2024/12/03 Version: AL



See enlarged drawings at the end of document

#### **Product specification**

- ethernet-capable spring clamp terminal block, SMT solderable
- direction of connection 90°
- fittable without loss of poles
- color green
- Tape & Reel packaging
- finger push-button
- · test point and wire connection indicator
- · Variants: black, creme white, yellow, green, red, blue, orange, gray, brown, white



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#### P/N SM99S01VBNN03G7

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Tec	hnical	Data

General Data	
pole size	1
Insulating material class	CTI 600
Protection category	IP20
Insul. strip length	7 mm
Rated current	9 A
Terminal data	
rat.wiring solid AWGmax	0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup> / AWG 24 - AWG 16
rat.wiring strand.AWGmax	0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup> / AWG 24 - AWG 16
Approvals	
C US V/A/AWG	300 / 9 / 24 - 16
approval UL - File No.	E121004
0.75 mm <sup>2</sup>	9 A / T60

#### Transmission characteristics

2-pole   Data transmission according to IEEE 802.3cg	10 Mbit/s up to 1.000 m STP
2-pole   Data transmission according to IEEE 802.3bp	1GBit/s up to 15 m UTP 1GBit/s up to 40 m STP
4-pole   Data transmission according to IEEE 802.3i/u/y	10/100 MBit/s up to 100 m
8-pole   Data transmission according to IEEE 802.3ab	1 GBit/s up to 100 m
8-pole   Data transmission according to IEEE 802.3an	10 GBit/s up to 100 m
2-pole   Power transmission	PoDL, IEEE 802.3bu 60 W
4-pole   Power transmission	PoE, IEEE 802.3af, 15,4 W PoE+, IEEE 802.3at, 30 W
8-pole   Power transmission	PoE, IEEE 802.3af, 15,4 W PoE+, IEEE 802.3at, 30 W 4PPoE, IEEE802.3bt, 90 W
Material	
insulating material	PPA
flammability class	V0
spring material	Spring steel
contact material	CuSn







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#### P/N SM99S01VBNN03G7

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Technical Data	
Contact surface	Sn
Glow-Wire Flammability GWFI	850 °C acc. to IEC 60695-2-12
Glow-Wire Flammability GWIT	775 °C acc. to IEC 60695-2-13
Climatic Data	
upper limit temperature	105 °C
lower limit temperature	-40 °C
general	
Tolerance	ISO 2768 -mH
Solderability	reflowable
Note PCB compensation	The PCB compensation is necessary to achieve the specified data transmission specifications

#### **Application note**

This product is a standard product of METZ CONNECT. METZ CONNECT is not aware of the specific intended use of the goods by the Customer or any customers of the Customer. The Customer guarantees that it has fully and sufficiently tested the use of the goods and any product modifications, product changes or product enhancements with regard to the specific intended use in accordance with the state of the art or in any other way. At METZ CONNECT's request, the Customer shall submit and make available meaningful evidence (e.g. test and laboratory protocols, certifications, etc.).





# U Contact

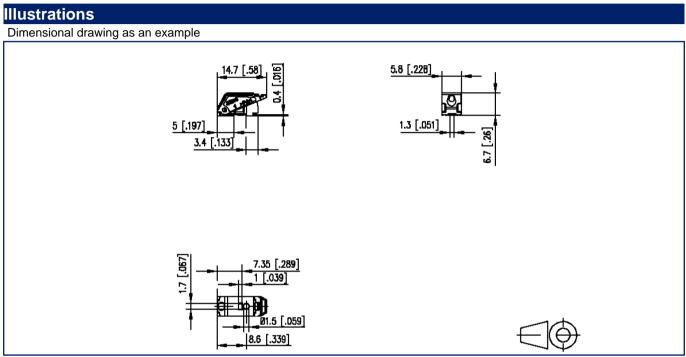
# Data sheet SM99S01VBNN03G7 green



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#### P/N SM99S01VBNN03G7

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Illustrations

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#### P/N SM99S01VBNN03G7

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#### PCB-Layout x0.86=9.46 [.372] 0.2 [.008] 2polig/2poles 2.75 [.108] 2.75 [.108] in this area on no layer ground plane conductor width 0.5 [.02] 5 [.034] 6.87 0.25 [.01] 8 0.75 [.03] .97 [.078] 35 [.014] 1.64 [.164] I 2 [.079] 1.6 [.063] 3.25 [.128] 0.843pF/600MHz 4 [.157]

- PCB with solder resist
- PCB thickness: 1.5 mm / 2-ply
- Material: FR4
- Dielectric constant: relative permittivity = 4.4
- Copper thickness: 40 µm





#### Data sheet SM99S01VBNN03G7 green

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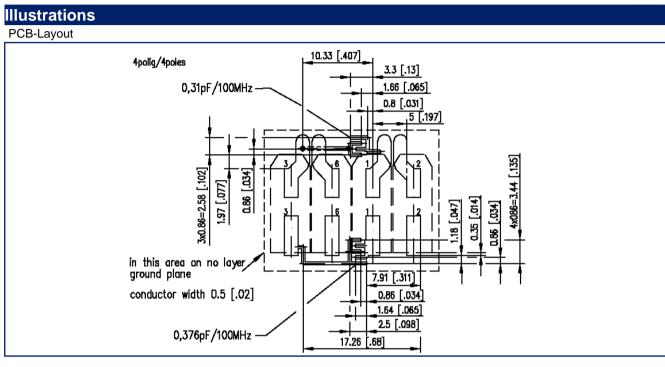
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- PCB with solder resist
- PCB thickness: 1.5 mm / 2-ply
- Material: FR4
- Dielectric constant: relative permittivity = 4.4
- Copper thickness: 40 µm





# Data sheet SM99S01VBNN03G7 green

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#### P/N SM99S01VBNN03G7

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#### Illustrations PCB-Layout 8polig/8poles 11 [.433] 12 [.472] 12 [.472] 4.23 [.167] 0.223pF/500MHz 2.64 [.104] T 1.74 [.069] 0.244pF/500MHz 0.213pF/500MHz\* 6.34 [.249] 3x0.86=2.58 [.102] 0.86 [.034] 0.86 0.034 \$8 7 7 5 ຽ ŝ Ħ 2.22 [.087 12 [.472 12 [.472] н 0.86 [.034] in this area on no layer 0.353pF/500MHz-1.64 [.065] ground plane 0.368pF/500MHz 9.35 [.368] conductor width 0.5 [.02] 0.318pF/500MHz

- PCB with solder resist
- PCB thickness: 1.5 mm / 2-ply
- Material: FR4
- Dielectric constant: relative permittivity = 4.4
- Copper thickness: 40 µm



# Data sheet SM99S01VBNN03G7 green



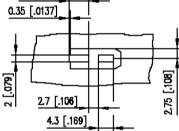
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#### P/N SM99S01VBNN03G7

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# PCB-Layout



- PCB with solder resist
- PCB thickness: 1.5 mm / 2-ply
- Material: FR4
- Dielectric constant: relative permittivity = 4.4
- Copper thickness: 40 µm



