

Data sheet

IT02304HMNU000 PROFINET

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P/N
AIT0230499-000

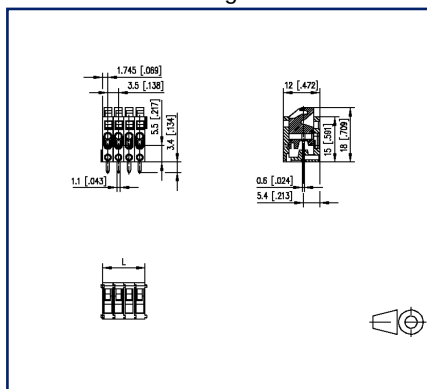
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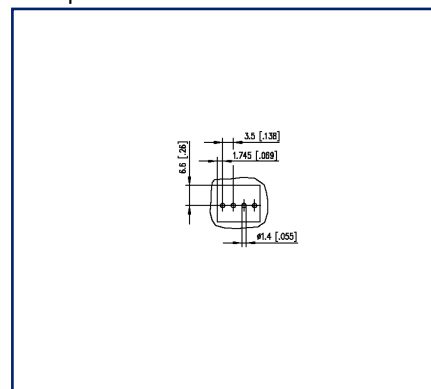
Illustrations



Dimensional drawing



Drill pattern



See enlarged drawings at the end of document

Product specification

- ethernet-compatible insulation displacement connector, solderable
- for 100 MBit Fast Ethernet (IEEE 802.3u)
- suitable for Power over Ethernet (PoE, PoE plus)
- centerline 3.50 mm, direction of connection 90°
- modular
- color coding for conductor colors according to PROFINET (white/blue/yellow/orange)



Technical Data

General Data

Solder pin length	3.5 mm		
pole size	4		
Insulating material class	CTI 600		
clearance/creepage dist.	2.3 mm		
Protection category	IP20		
wire insulation	1.8 mm		
Rated current	2.5 A		
Overvoltage category	III	III	II
Pollution degree	2	2	2
Rated voltage	160 V	400 V	400 V
Rated test voltage	2.5 kV	2.5 kV	2.5 kV

Terminal data

rat.wiring solid AWGmax	0.2 mm ² - 0.34 mm ² / AWG 24 - AWG 22
rat.wiring strand.AWGmax	0.2 mm ² - 0.34 mm ² / AWG 24 - AWG 22

Approvals

 V / A / AWG	150 / 2.5 / 24 - 22
approval UL - File No.	E121004
 0.34 mm ²	130 V / 5 A / T60

Transmission characteristics

Data transmission according to IEEE 802.3i/u/y	10/100 MBit/s up to 100 m
Power transmission	PoE, IEEE 802.3af, 15,4 W PoE+, IEEE 802.3at, 30 W

Material

insulating material	PA66
flammability class	V0
contact material	CuSn
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

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Technical Data

upper limit temperature	105 °C
lower limit temperature	-40 °C
general	
Tolerance	ISO 2768 -mH
Solderability	Acc. to JEDEC JESD22-B102E 245°C/5s
Note PCB compensation	The PCB compensation is necessary to achieve the specified data transmission specifications

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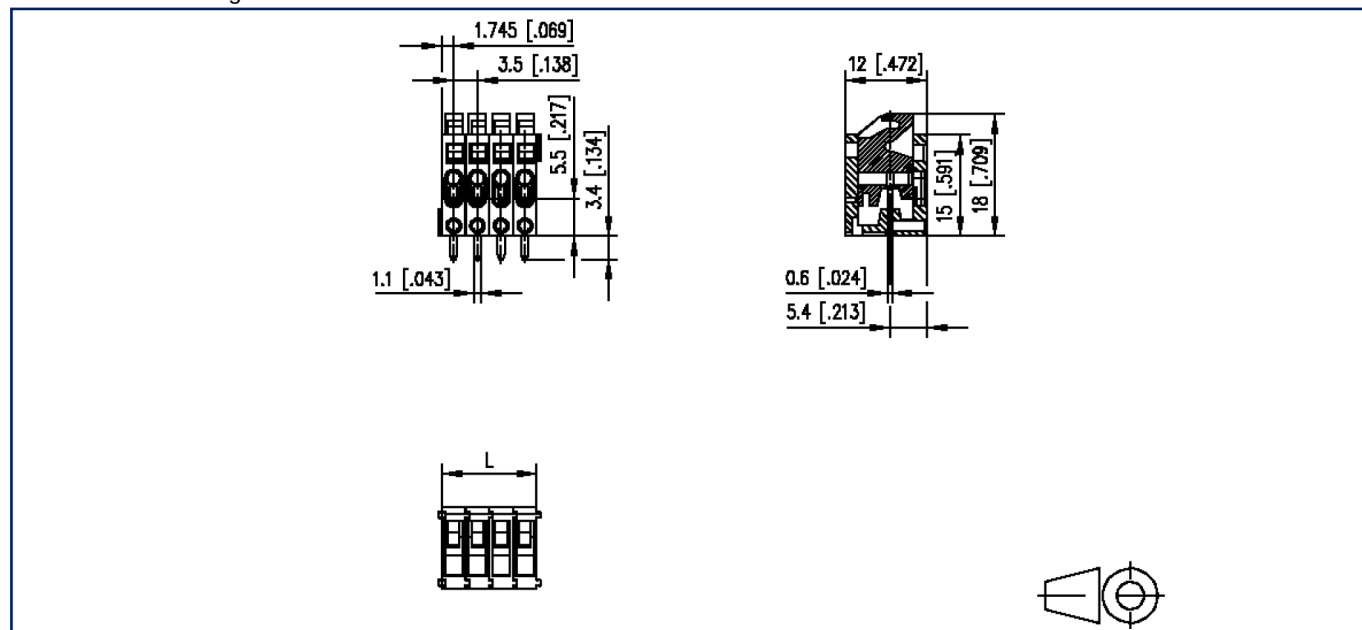
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Illustrations

Dimensional drawing



$L = (\text{pole size} - 1) \times \text{centerline} + 3.5 \text{ mm} [0.138]$



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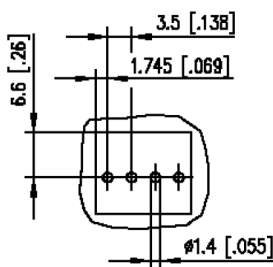
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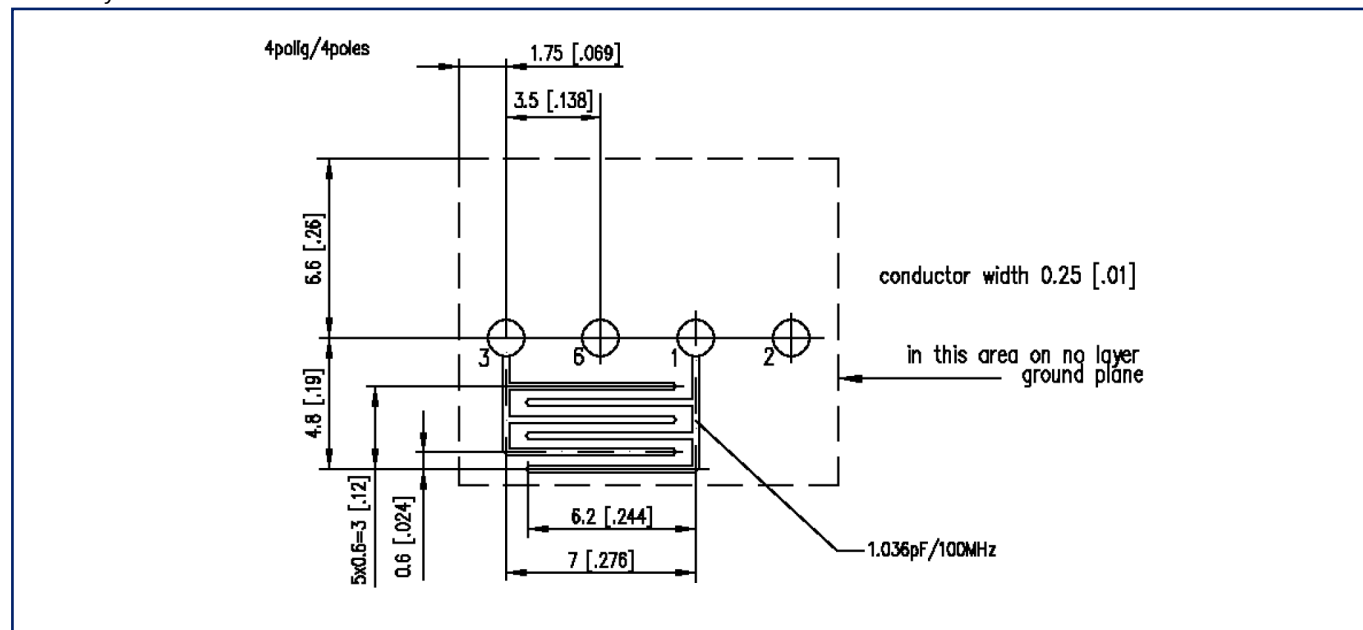
Illustrations

Drill pattern



Illustrations

PCB-Layout



General PCB specifications

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

