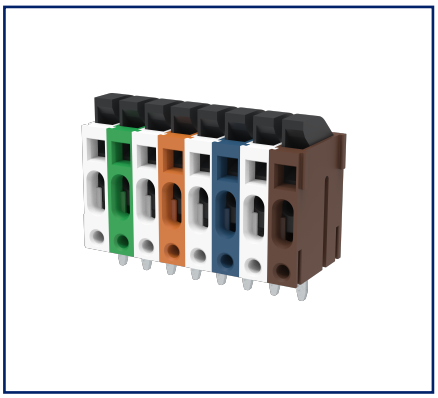
Data sheet
IT02308HMNU001 ETHERNET

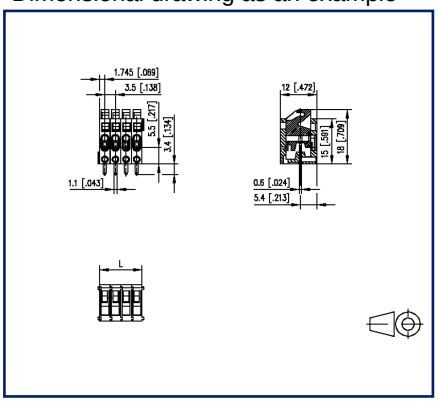
P/N
AIT0230899-001

2025/11/03
Version: O

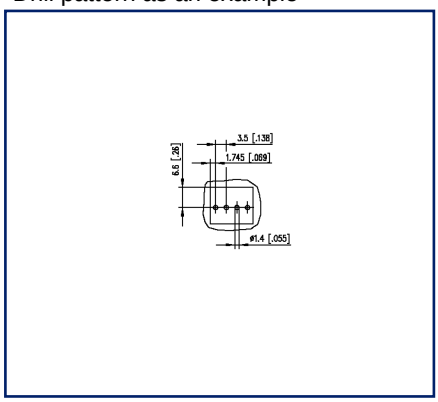
Illustrations



Dimensional drawing as an example



Drill pattern as an example



See enlarged drawings at the end of document

Product specification

- ethernet-compatible insulation displacement connector, solderable
- suitable for up to 10 GBit Ethernet (IEEE 802.3an)
- compliance with class E_A according to ISO/IEC 11801, DIN EN 50173-1
- suitable for Power over Ethernet/Remote Powering (PoE, PoE plus, UPoE and 4PPoE)
- centerline 3.50 mm, direction of connection 90°
- modular
- color coding for conductor colors according to T568 (white/green/white/orange/white/blue/white/brown)

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Weitere Dokumentation siehe / additional documentation see / documentation supplémentaire voir www.metz-connect.com

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Technical Data

General Data			
Solder pin length	3.5 mm		
pole size	8		
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	3	2	2
Rated voltage	160 V	400 V	400 V
Rated test voltage	4 kV	4 kV	4 kV
Terminal data			
rat.wiring solid AWGmax	0.2 mm² - 0.34 mm² / AWG 24 - AWG 22		
rat.wiring strand.AWGmax	0.2 mm² - 0.34 mm² / AWG 24 - AWG 22		
Approvals			
c UL us V / A / AWG	150 / 2.5 / 24 - 22		
approval UL - File No.	E121004		
SEV	130 V / 5 A / T60		

Transmission characteristics	
Data transmission according to IEEE 802.3ab	1 GBit/s up to 100 m
Data transmission according to IEEE 802.3an	10 GBit/s up to 100 m
Power transmission	PoE, IEEE 802.3af, 15,4 W PoE+, IEEE 802.3at, 30 W 4PPoE, IEEE802.3bt, 90 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

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Technical Data

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	Acc. to JEDEC JESD22-B102E 245°C/5s
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.).

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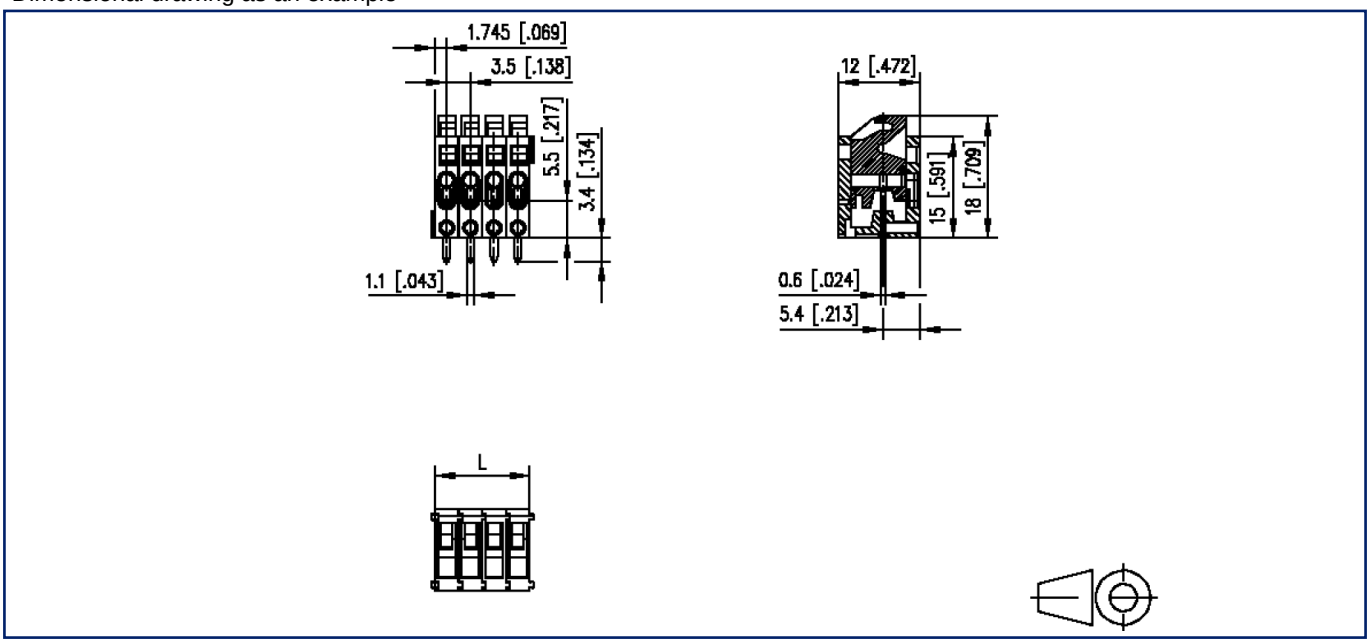

L=(pole size - 1) x centerline + 3.5 mm [0.138]

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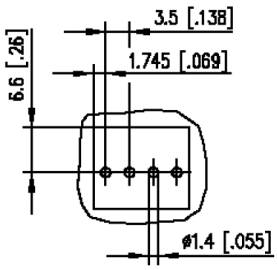
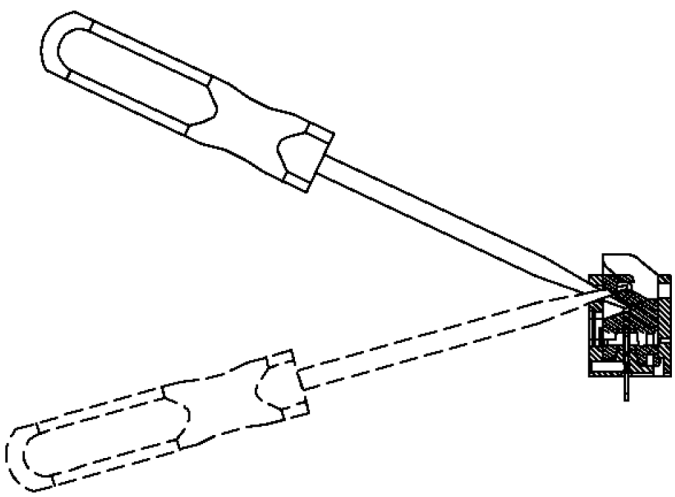


Application example



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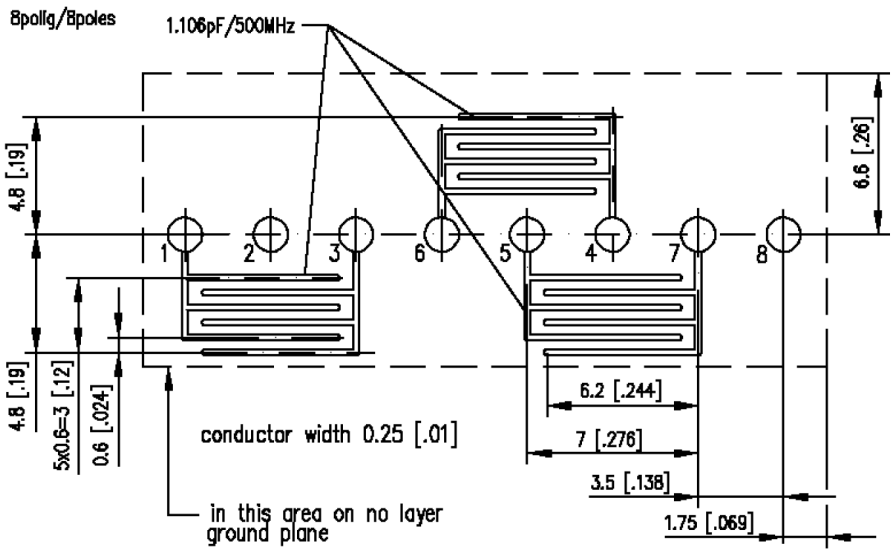
PCB-Layout



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