

M12 transf. 1000BASE-T x ANG w/o PoE



| Part number | 21 03 381 4820 |
|--------------------|--------------------------------------|
| Specification | M12 transf. 1000BASE-T x ANG w/o PoE |
| HARTING eCatalogue | https://b2b.harting.com/21033814820 |

Image is for illustration purposes only. Please refer to product description.

Identification

| Category | Connectors |
|----------------|------------------------------------|
| Series | Circular connectors M12 |
| Identification | Magnetics |
| Element | PCB adapter |
| Specification | with integrated transformer Angled |

Version

| Termination method | Reflow soldering termination (SMT) |
|--------------------|------------------------------------|
| Gender | Female |
| Shielding | Shielded |
| Number of contacts | 8 |
| Coding | X-coding |
| Details | Order housings separately |
| Pack contents | 30 pieces in a tray |

Technical characteristics

| Rated current | 0.8 A |
|-----------------------|--------------------|
| Rated voltage | 57 V |
| Rated impulse voltage | 1.5 kV |
| Pollution degree | 3 |
| Data rate | 1 Gbit/s |
| Insulation resistance | >10 ⁸ Ω |



Technical characteristics

| Contact resistance | ≤10 mΩ |
|--|--|
| Limiting temperature | -40 +85 °C (during reflow soldering max. +245) |
| Insertion force | 30 N |
| Withdrawal force | 30 N |
| Mating cycles | ≥100 |
| Degree of protection acc. to IEC 60529 | IP65 / IP67 mated condition |
| Isolation group | IIIa (175 ≤ CTI < 400) |
| Process Sensitivity Level (PSL) | R7 acc. to ECA/IPC/JEDEC J-STD-075 |

Material properties

| ' ' | |
|---|--|
| Material (insert) | Liquid crystal polymer (LCP) |
| Colour (insert) | Black |
| Material (contacts) | Brass |
| Surface (contacts) | Au over Ni Mating side |
| Material flammability class acc. to UL 94 | V-0 |
| RoHS | compliant with exemption |
| RoHS exemptions | 6(c): Copper alloy containing up to 4 % lead by weight |
| ELV status | compliant with exemption |
| China RoHS | 50 |
| REACH Annex XVII substances | Not contained |
| REACH ANNEX XIV substances | Not contained |
| REACH SVHC substances | Yes |
| REACH SVHC substances | Lead |
| ECHA SCIP number | 0d7d3693-d625-47ab-934a-d241bf72c86e |
| California Proposition 65 substances | Yes |
| California Proposition 65 substances | Lead Nickel Naphthalene |
| Fire protection on railway vehicles | EN 45545-2 (2020-08) |
| Requirement set with Hazard Levels | R26 |
| | |

Specifications and approvals

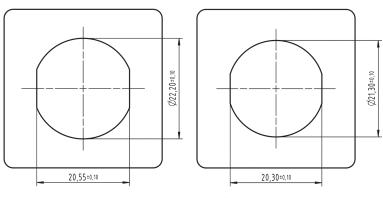
| Specifications | IEC 61076-2-109 | |
|----------------|-----------------|--|
| | | |



Commercial data

| Packaging size | 30 |
|--------------------------------|--|
| Net weight | 20.17 g |
| Country of origin | China |
| European customs tariff number | 85366990 |
| GTIN | 5713140228948 |
| eCl@ss | 27460201 PCB connector (board connector) |

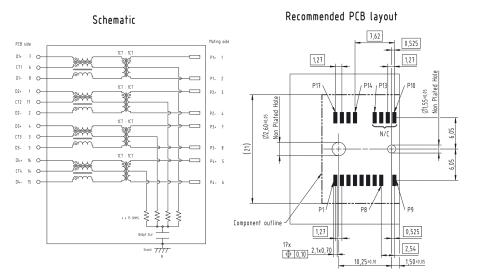
Panel cut out



Front mounting use

Rear mounting use

General information



Electrical Characteristics @+25°C unless otherwise noted Meets IEEE802.3 specification RoHS compliant

| Parameter | Specification/ Limit Values |
|--|---|
| Operating Temperature | -40°C - +85°C |
| Turn Ratio (+/- 2%) | 1CT : 1CT |
| OCL | min 350µH @ 100KHz , 100mV with 8mA bias current |
| Isolation (Input- Output) | 2.25kV VDC , for 60sec. min |
| | f ≤ 100MHz |
| Insertion Loss | 1.3 db |
| Return Loss | 9 db |
| Crosstalk | 30 db |
| CMRR | 30 db |
| CDMR | 30 db |
| NOTE: 1. f is the frequency in MHz | |
| 2. The Product has been tested for DC isolation, HARTING | |



Tape layout & packaging

