

1664049
<https://www.phoenixcontact.com/us/products/1664049>

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Filtered RJ45 PCB connectors, connection direction of the connector to the PCB: 180 °, number of positions: 8, 1 Gbps, THT, Wave, type of packaging: Tray

Your advantages

- Simplified Ethernet design process thanks to integrated filtering
- Reduced PCB complexity and reduced EMC risks
- Tray packing
- Space-saving due to the compact design
- Outstanding EMI performance
- Enables space-saving PCB design while simultaneously reducing the BOM thanks to integrated filters and transformers
- Ideal for demanding industrial applications due to the high shock and vibration resistance as well as the extended temperature range

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1664049 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | AB12 |
| Product key | ABNAFA |
| GTIN | 4067923204805 |
| Weight per piece (including packing) | 8.8 g |
| Weight per piece (excluding packing) | 6.3 g |
| Customs tariff number | 85366930 |
| Country of origin | CN |

CUC-IC1G-J1ST-S/R4T - Filtered RJ45 PCB connectors



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Technical data

Product properties

| | |
|--------------------------|------------------------------|
| Product type | Data connector (device side) |
| Sensor type | Universal |
| Number of positions | 8 |
| Note number of positions | 8P8C |
| Connection profile | RJ45 |
| Housing shield springs | No |
| Number of slots | 1 |
| Shielded | yes |

Insulation characteristics

| | |
|----------------------|---|
| Overvoltage category | I |
|----------------------|---|

Electrical properties

| | |
|-----------------------|--|
| Rated surge voltage | 1.5 kV DC (IEC 60664-1) |
| Rated current | 0.5 A |
| Test voltage | 1.5 kV DC IEC 60603-7 (Contact - shield) |
| Insulation resistance | > 500 MΩ (IEC 60603-7) |
| Transmission speed | 1 Gbps |
| Transmission speed | 1 Gbps |

Connection data

Connection technology

| | |
|-------------------|--------|
| Connection method | Female |
|-------------------|--------|

Signaling

| | |
|------------------------|----|
| Status display present | no |
|------------------------|----|

Dimensions

| | |
|--------------------|----------|
| Width | 16 mm |
| Height | 19.8 mm |
| Length | 17 mm |
| Installed height | 16.80 mm |
| Orientation to PCB | 180.00 ° |
| Data pin length | 3.00 mm |

Material specifications

| | |
|------------------|--------------------------------|
| Material | Au (0.762 µm/30 µ") |
| Material | Ni (1,270 µm min / 50 µ" min) |
| Material | Sn (3,048 µm min / 120 µ" min) |
| Material | Ni (1,016 µm min / 40 µ" min) |
| Material Housing | Ni (0.762 µm min / 30 µ" min) |

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| | |
|--------------------------|--------------------------------|
| Material Contact | Phosphor bronze |
| Material | Sn (3,048 µm min / 120 µ" min) |
| Material Contact carrier | LCP (Housing (female/insert)) |

Cable/line

| | |
|------------------|----------|
| Halogen-free | yes |
| Flame resistance | UL 94 V0 |

Mechanical properties

Mechanical data

| | |
|-----------------------------|----------------------|
| Insertion/withdrawal cycles | > 750 (IEC 60603-7) |
| Insertion force | < 20 N (IEC 60603-7) |
| Withdrawal force | < 20 N (IEC 60603-7) |

Environmental and real-life conditions

Test specification

| | |
|---------------|-------------|
| Specification | IEC 60603-7 |
|---------------|-------------|

Ambient conditions

| | |
|---|--------------------|
| Degree of protection (when plugged in) | IP20 (IEC 60603-7) |
| Degree of protection | IP20 (IEC 60603-7) |
| Ambient temperature (operation) | -40 °C ... 85 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Standards and regulations

| | |
|------------------|----------|
| Flame resistance | UL 94 V0 |
|------------------|----------|

Mounting

| | |
|---------------|-----|
| Mounting type | THT |
|---------------|-----|

Processing notes

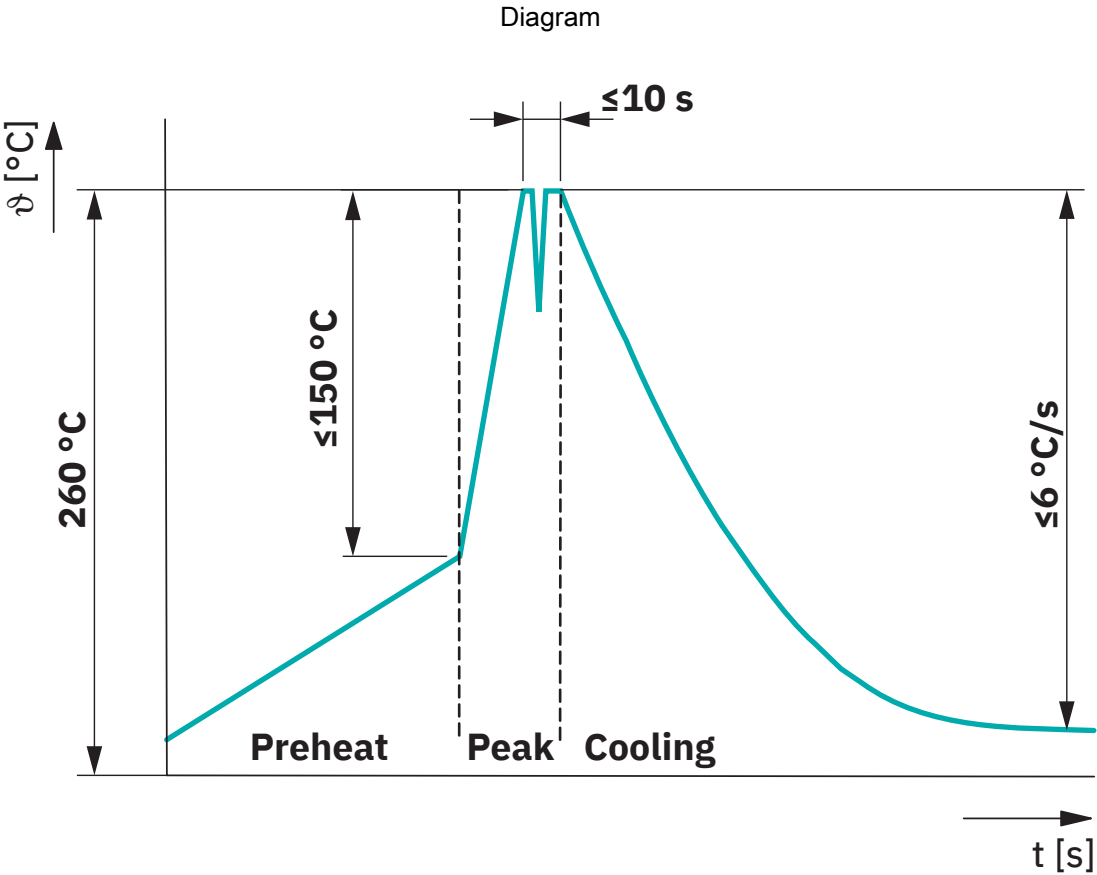
| | |
|---|--------|
| Classification temperature T _c | 260 °C |
|---|--------|

Packaging specifications

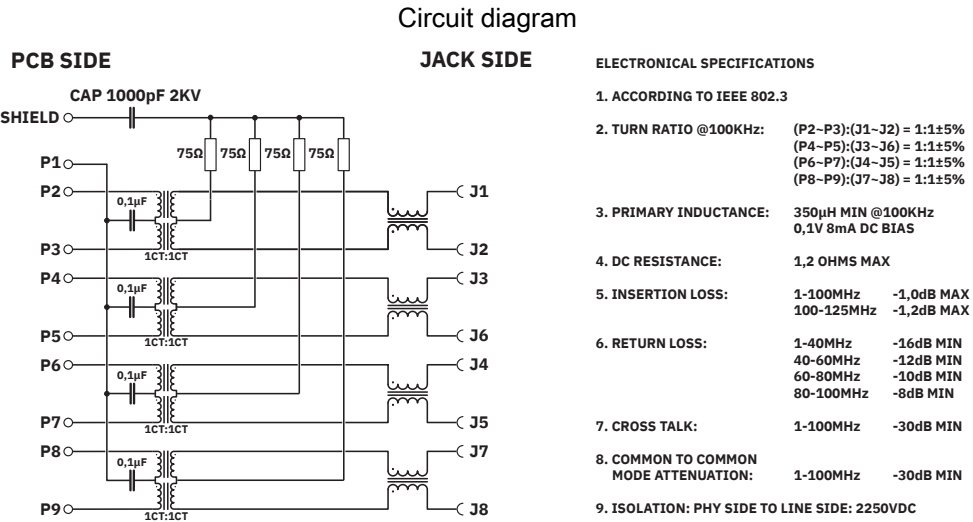
| | |
|-------------------|------|
| Type of packaging | Tray |
|-------------------|------|

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Drawings



Classification wave soldering profile



Circuit diagram

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27460201 |
| ECLASS-15.0 | 27460201 |

ETIM

| | |
|----------|----------|
| ETIM 9.0 | EC002637 |
|----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

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Environmental product compliance

| | |
|---|--|
| EU RoHS | |
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
| China RoHS | |
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |
| EU REACH SVHC | |
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |

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