

# CUC-IND-J1ST-S/R4LS - RJ45 PCB connectors



1091942

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RJ45 PCB connectors, design: RJ45, degree of protection: IP20, number of positions: 8, 10 Gbps, material: Metal, connection method: THR reflow/THT wave

## Your advantages

- Ideal for demanding applications due to the high shock and vibration resistance as well as the extended temperature range
- 360° shielding ensures reliable transmission, even in industrial applications
- Housing shield springs enable an optimized EMC shielding concept
- Enables data transmission rates of up to 10 Gbps
- Automated handling process thanks to reflow capability
- The extended temperature range from -40°C to +105°C enables use in demanding industrial applications
- Tray packing

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1091942       |
| Packing unit                         | 84 pc         |
| Minimum order quantity               | 84 pc         |
| Sales key                            | AB12          |
| Product key                          | ABNADA        |
| GTIN                                 | 4055626906348 |
| Weight per piece (including packing) | 5.26 g        |
| Weight per piece (excluding packing) | 5.2 g         |
| Customs tariff number                | 85366930      |
| Country of origin                    | CN            |

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## Technical data

### Product properties

|                        |                              |
|------------------------|------------------------------|
| Product type           | Data connector (device side) |
| Type                   | RJ45                         |
| Number of positions    | 8                            |
| Connection profile     | RJ45                         |
| Type of packaging      | Tray                         |
| Housing shield springs | No                           |
| Number of slots        | 1                            |
| Type                   | Socket                       |
| Shielded               | yes                          |

### Data management status

|                  |    |
|------------------|----|
| Article revision | 00 |
|------------------|----|

### Insulation characteristics

|                      |   |
|----------------------|---|
| Overvoltage category | I |
| Degree of pollution  | 2 |

### Electrical properties

|                             |                  |
|-----------------------------|------------------|
| Rated voltage (III/2)       | 72 V DC          |
| Rated surge voltage         | 1.5 kV DC        |
| Rated surge voltage (III/3) | 1.5 kV           |
| Rated surge voltage         | 1 kV DC          |
| Rated current               | 1.5 A            |
| Frequency range             | 10 Hz ... 500 Hz |
| Insulation resistance       | > 500 MΩ         |
| Test voltage                | 1 kV DC          |
| Test voltage Core/Core      | 1 kV DC          |
| Test voltage Core/Shield    | 1.50 kV DC       |
| Transmission medium         | Copper           |
| Transmission speed          | 10 Gbps          |
| Power transmission          | PoE++            |

### Connection data

#### Connection technology

|                   |                     |
|-------------------|---------------------|
| Connection method | THR reflow/THT wave |
|-------------------|---------------------|

### Dimensions

|                  |          |
|------------------|----------|
| Width            | 16.1 mm  |
| Height           | 14.7 mm  |
| Length           | 17.9 mm  |
| Installed height | 14.30 mm |

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|                 |          |
|-----------------|----------|
| Orientation to  | 180.00 ° |
| Data pin length | 3.18 mm  |

### Material specifications

|  |   |
|--|---|
| Material                               | Au (1.27 µm/50 µ") (Metal surface contact area (top layer)) |
|  | Ni (Metal surface contact area (middle layer))              |
|  | Au (Metal surface soldering area (top layer))               |
|  | Ni (Metal surface soldering area (middle layer))            |
|  | Copper alloy (Housing (shielding))                          |
| Flammability rating according to UL 94 | V0  |
| Housing material                       | Metal   |
| Housing surface material               | Ni  |
| Contact material                       | Copper alloy  |
| Contact surface material               | Gold  |

### Cable/line

|                          |            |
|--------------------------|------------|
| Test voltage Core/Core   | 1 kV DC    |
| Test voltage Core/Shield | 1.50 kV DC |
| Halogen-free             | yes        |

### Mechanical properties

#### Mechanical data

|                                     |           |
|-------------------------------------|-----------|
| Insertion/withdrawal cycles         | > 750     |
| Insertion force per signal contact  | < 20.00 N |
| Extraction force per signal contact | < 20 N    |

### Environmental and real-life conditions

#### Test specification

|               |                        |
|---------------|------------------------|
| Frequency     | 10-500 Hz              |
| Sweep speed   | 1 octave/min           |
| Amplitude     | 0.35 mm                |
| Acceleration  | 50.00 m/s <sup>2</sup> |
| Test duration | 20.00 s                |

#### Test specification

|               |                         |
|---------------|-------------------------|
| Specification | IEC60068-2-27           |
| Acceleration  | 295.00 m/s <sup>2</sup> |

#### Ambient conditions

|   |                   |
|---|-------------------|
| Degree of protection                    | IP20              |
| Ambient temperature (operation)         | -40 °C ... 105 °C |
| Ambient temperature (storage/transport) | -40 °C ... 105 °C |

### Mounting

|               |               |
|---------------|---------------|
| Mounting type | THR soldering |
|---------------|---------------|

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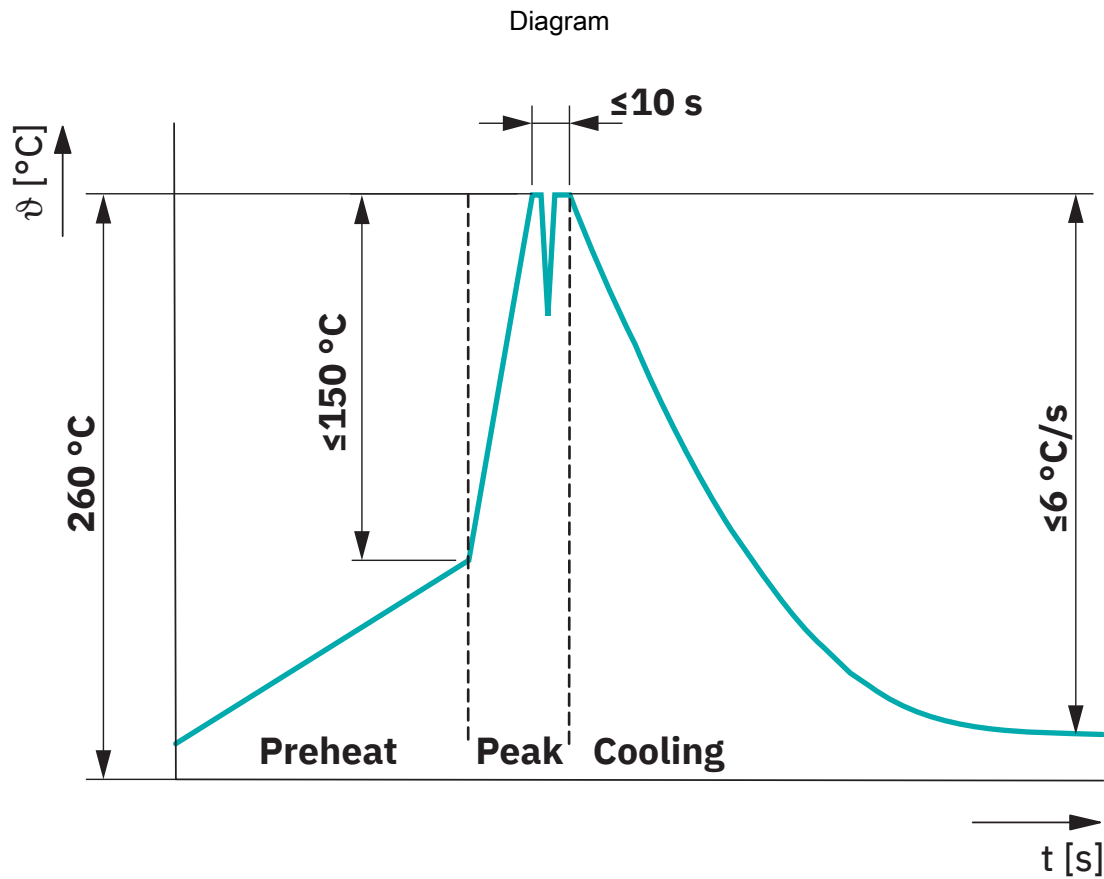
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## Processing notes

|   |        |
|---|--------|
| Moisture Sensitive Level                  | MSL 1  |
| Classification temperature T <sub>c</sub> | 260 °C |
| Solder cycles in the reflow               | 3      |

Drawings



Classification wave soldering profile

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## Approvals

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**cUL Recognized**  
Approval ID: FILE E 335024



**UL Recognized**  
Approval ID: FILE E 335024

**cULus Recognized**

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27440223 |
| ECLASS-12.0 | 27440223 |
| ECLASS-13.0 | 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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