

Industrial Ethernet IE-PCB-RJ45-THR-C6-SLM2

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IE plug-in connectors, IP20, for copper and fibre optic cables

General ordering data

Type	IE-PCB-RJ45-THR-C6-SLM2
Order No.	1534760000
Version	RJ45 PCB socket, 180°, THT/THR solder connection, IP20
GTIN (EAN)	4050118338423
Qty.	60 pc(s).
Packaging	Tray; Rs = 10 ⁹ - 10 ¹² Ω

Data sheet

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Technical data

Dimensions and weights

Net weight 6.433 g

Temperatures

Operating temperature -40 °C...85 °C Storage temperature
 Installation temperature

Electrical properties

Contact resistance	≤ 20 mΩ	Dielectric strength, contact / contact	≥ 1000 V DC
Insulation resistance	> 500 MΩ	Rated current	1.5 A
Rated voltage	125 V AC		

Material data

Insulating material	PA 9T	Insulating material group	II
CTI	≥ 500	UL 94 flammability rating	V-0
Contact material	Phosphorus bronze	Contact surface	Selective gold 30 μ"
Shielding material	Copper alloy	Shield surface	nickel-plated
Moisture Level (MSL)	1		

Standards

Connector standard IEC 60603-7-5 1 Certificate No. (UL) E471884

System parameters

Wiring	10-wire	Outgoing elbow	180°
Number of solder pins per pole	1	Mounting onto the PCB	THT/THR solder connection
Solder eyelet hole diameter (D)	0.9 mm	Solder eyelet hole diameter tolerance (D)	± 0.1 mm
Solder pin length (l)	3.2 mm	Solder pin dimensions	0.40 x 0.30 mm, LED pins = 0.50 x 0.50 mm
Pitch in inches (P)	0.05 inch	Pitch in mm (P)	1.27 mm
Insulation resistance	> 500 MΩ	No. of poles	10
Packaging	Tray; Rs = 10 ⁹ - 10 ¹² Ω	Pin series quantity	1
Plugging cycles	750	Protection degree	IP20
Shielding	Yes		

Classifications

ETIM 6.0	EC001121	eClass 6.2	27-25-05-04
eClass 7.1	27-25-05-04	eClass 8.1	19-17-01-25
eClass 9.0	19-17-01-25	eClass 9.1	27-44-09-90

Approvals

Approvals



ROHS Conform

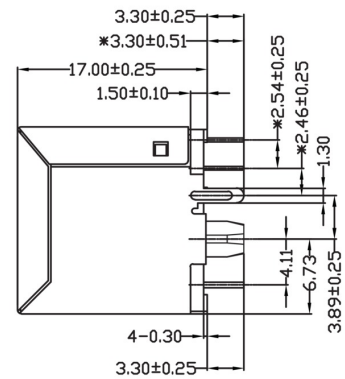
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Drawings

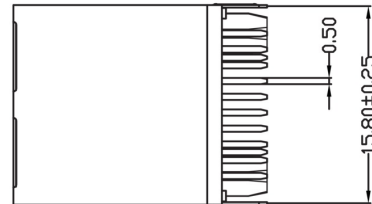
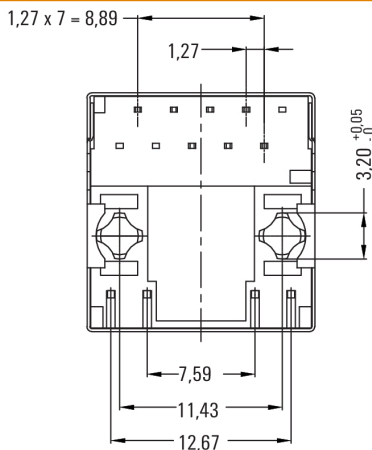
Dimensioned drawing

Dimensioned drawing



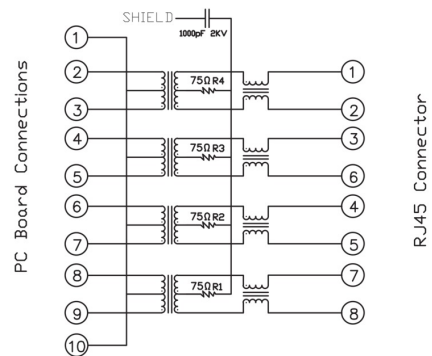
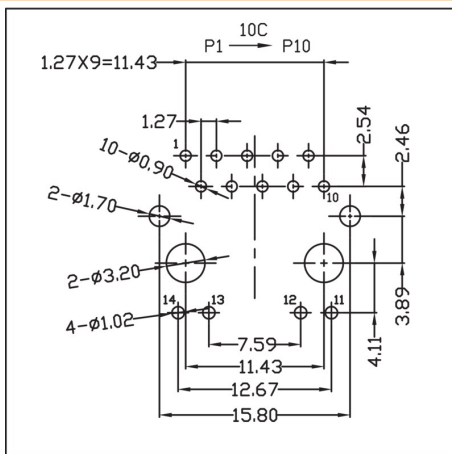
Dimensioned drawing

Dimensioned drawing



PCB design

Wiring diagram



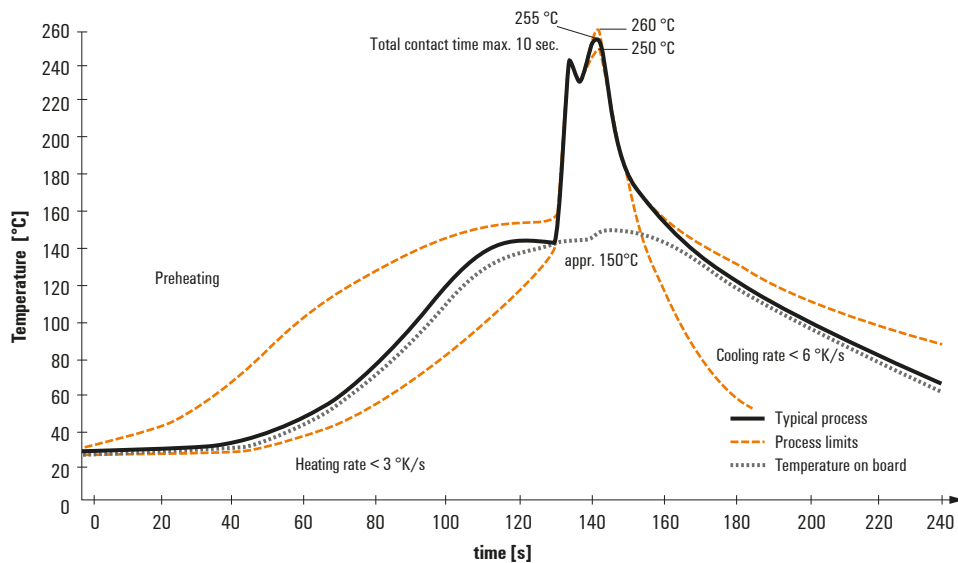
Recommended wave soldering profiles

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Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

Recommended reflow soldering profile

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Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- Maximum heating rate
- Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically $\leq +3\text{K/s}$. In parallel the solder paste is ‚activated‘. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at $\geq -6\text{K/s}$ solder is cured. Board and components cool down while avoiding cold cracks.