Components suitable for reflow process must withstand higher temperatures than for standard wave soldering. Therefore, WAGO components are made from high-temperature-resistant material and designed to provide optimal heat supply to the soldering point. These components have a suction area for automated pick-and-place assembly and are also available in tape-and-reel packaging. This allows WAGO THR and SMD components to be fully integrated into the SMT production process, resulting in greater cost savings.

**Materials**

Plastic material for components must resist a maximum peak temperature of 260°C for 10 seconds (temperature profile per DIN EN 61760-1) and match the PCB base material’s coefficient of thermal expansion (CTE) to prevent warpage of both component and PCB. WAGO’s PCB terminal blocks and connectors are molded of glass-fiber-reinforced insulation plastic that withstands temperatures up to 260°C. Both material and design provide optimal processing performance at high temperatures.

**Surface Mount Technology (SMT)**

Surface Mount Technology (SMT) means soldering electronic components directly onto PCB surface pads without drilling holes. The basic SMT process consists of applying solder paste to the PCB via solder dispensing equipment, screen or stencil printing. SMT assembly is performed using fully automated placement machines. Surface-mount components are soldered to the board in infrared, convection or vapor phase ovens. Mechanically stressed THR components, like PCB terminal blocks and connectors, are placed into metal-plated holes filled with solder paste. They can then be soldered along with surface-mount components using the time-saving and cost-effective reflow soldering process. WAGO’s THR components are designed for fully automated assembly and withstand high-temperature reflow soldering processes.
**PRODUCT OVERVIEW SORTED BY PIN SPACING**

**picoMAX® 150**
- 630 V/6 kV/2 16 A

**picoMAX® MCS**
- 630 V/6 kV/2 9 A
  - 320 V/4 kV/2 12 A
- 160 V/2.5 kV/2 10 A

**Thr Male and Female Headers**
- 160 V/2.5 kV/2 6 A

**MINI HD, 713 Series**
- 2.5 mm male headers with straight solder pins

**MINI, 734 Series**
- 1.2 x 1.2 mm male headers with angled solder pins

**MIDI, 231 Series**
- 1 x 1 mm male headers with angled solder pins

**THR PCB terminal blocks**
- Terminal strips (tape-and-reel)

**THR Terminal Blocks**
- THR PCB terminal blocks
  - 320 V/4 kV/2 17.5 A
  - 0.5 mm²

**SMD PCB Terminal Blocks**
- Through-Board SMD positioning pattern
  - Component assembly, automatic/by hand

**Component assembly, automatic by hand**

**Handling:** Open the clamping unit, insert the conductor, terminate both solid and ferruled conductors by simply pushing them in –

**Packaging:** (depending on the model used)
- Push-WIRE® connection for solid and stranded conductors
- Terminal strips with push-buttons
- THR PCB terminal blocks

**Notes:**
- D: Pin diagonal/diameter
- L: Pin length
- S: Inner diameter of metal-plated PCB bore hole
- Th: Outer diameter of metal-plated PCB hole

**Dimensions:**
- D (mm):
  - 1.8, 1.9, 2.3, 2.4, 2.7
- L (mm):
  - 2.4, 2.8
- Th (mm):
  - 1.8, 1.9
- S (mm):
  - 0.9, 1.2

**Additional Notes:**
- Di: Pin diameter
- H (mm):
  - 6, 150

**Technical Information:**
- For detailed information, contact your local sales representative.
- Compliance with RoHS and WEEE directive.

**Ordering Code:**
- 713-250 Series
- 733-231 Series
- 236-2091 Series
- 250 Series
- 218 Series
- 2060 Series
- 2061 Series

**Table:**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Type</th>
<th>Package</th>
<th>Voltage</th>
<th>Current</th>
<th>Resistance</th>
<th>Insulation</th>
<th>Notes</th>
<th>Dimension</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>713-250</td>
<td>Male headers with straight solder pins</td>
<td>MINI HD, 713 Series</td>
<td>Tape-and-reel</td>
<td>630 V</td>
<td>16 A</td>
<td>0.45</td>
<td>Class II</td>
<td></td>
<td>2.5 mm</td>
<td>50 g</td>
</tr>
<tr>
<td>733-231</td>
<td>Male headers with angled solder pins</td>
<td>MINI, 734 Series</td>
<td>Tape-and-reel</td>
<td>630 V</td>
<td>16 A</td>
<td>0.45</td>
<td>Class II</td>
<td></td>
<td>2.5 mm, 1 x 1 mm</td>
<td>50 g</td>
</tr>
<tr>
<td>236-2091</td>
<td>Male headers with angled solder pins</td>
<td>MIDI, 231 Series</td>
<td>Tape-and-reel</td>
<td>630 V</td>
<td>16 A</td>
<td>0.45</td>
<td>Class II</td>
<td></td>
<td>1 x 1 mm</td>
<td>50 g</td>
</tr>
</tbody>
</table>

**Packaging:**
- (depending on the model used)
- Push-WIRE® connection for solid and stranded conductors
- Terminal strips with push-buttons
- THR PCB terminal blocks