REDCUBE Terminals are the most reliable high-power contacts on PCB level. Low contact resistance guarantees minimum self-heating. Four different designs cover all leading processing technologies and offer a wide range of applications.

www.we-online.com/redcube

- Flexibility in processing and connection technologies
- Highest current ratings up to 500 A
- Board-to-Board and Wire-to-Board solutions
- Extremely low self-heating
- Robust mechanical connection
RED CUBE PRESS-FIT

The current rating of RED CUBE PRESS-FIT is impressive. With the same ampacity, RED CUBE PRESS-FIT has the lowest heat development compared to other parts that supply power for PCBs.

APPLIcATIONS
- High current Wire-to-Board & Board-to-Board connections
- Mounting of copper bars on PCBs
- Angled assembling of cable, PCB and housing
- Mounting of IGBT modules

REMARKABLE PERFORMANCE

With the lowest Failure-In-Time value, RED CUBE PRESS-FIT is the most reliable technology on PCB. The FIT value is up to 30 times better than that of a SMD solder joint.

RED CUBE PRESS-FIT is suitable for two-side mounting and allows very compact design of modules.

ADVANTAGES
- Simple & quick processing
- No cold solder joints
- High process safety
- Low self heating

PRESS-FIT PROCESS

Pressing the pins into the PCB, a high friction between pin and plated through-hole generates a homogeneous cold-welding between materials. This results in a gastight, strong mechanical connection with contact resistance less than 200 µOhm. No other technology transfers power up to 500 A at this low heat development.

CHARACTERISTICS
- Homogeneous material transition between pin and through-hole plating
- Contact resistance less than 200 µΩ
- Gastight electrical and mechanical connection
- Extremely strong mechanical connection
REDCUBE PLUG

The new quick and easy pluggable solution REDCUBE PLUG offers all press-fit advantages; it is a multiple times pluggable solution for high-current applications.

**APPLICATIONS**

- High current and reversible Wire-to-Board connections
- Battery charger
- Multiple times pluggable solutions
- Mounting in very tight spaces
- Mounting areas with difficult access

**OUTSTANDING FEATURES**

REDCUBE PLUG consists of a REDCUBE Terminal, surrounded by a glass fiber-reinforced plastic housing. Pushing on the top of the housing allows mating the corresponding cable connector. After actuating, the spring returns to its initial position and locks the cable connector automatically into the housing.

**ADVANTAGES**

- Quick and easy assembling
- Tool-free and screwless mounting
- Multiple times pluggable
- Press-Fit advantages

**SIMPLE PROCESSING**

REDCUBE PLUG uses standard tools for the press-fit process. A general hexagonal crimpler is used to install the contact on to the wire, this simple lug like crimp set the bond in place. A special posttreatment technology and specific plating of the cable connector guarantee optimal crimping results.

**CHARACTERISTICS**

- Standard hexagonal crimping tools
- Gastight and strong crimp connection
- Special plating for optimal crimping results
**RED CUBE SMD & THR**

**RED CUBE SMD** and **THR** are the result of the growing demand in the electronic market: high current technology in combination with fully automated, timesaving processing.

### APPLICATIONS
- High current Wire-to-Board and Board-to-Board connections
- Angled assembling of cable, PCB or housing

### IMPRESSIVE CHARACTERISTICS

A large connecting area of **RED CUBE SMD** achieves a low contact resistance and best holding forces. The small size of **RED CUBE SMD** allows a high packing density without critical heat development on the PCB.

### ADVANTAGES
- Simple and fast automated assembly
- High packing density
- Efficient and timesaving soldering process
- Angled assembling of cable, PCB or housing
- Tape & Reel

### SPECIAL DESIGN

**RED CUBE THR** have a special design for best soldering results. Milling from solid material the torques are significantly better compared to stamped contacts. **RED CUBE THR** have the highest ampacity of fully automatically processed high-current components.

### ADVANTAGES
- Optimal current distribution in multilayer applications
- Fully automated reflow soldering
- High mechanical stability
- Low heat development
- Low profile
- Tape & Reel
<table>
<thead>
<tr>
<th>REDCUBE TERMINALS</th>
<th>THREAD SIZE / DIAMETER</th>
<th>TYPE</th>
<th>CONNECTION TO REDCUBE</th>
<th>PACKAGING</th>
<th>CURRENT UP TO (*20 °C)</th>
<th>OPERATING TEMPERATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REDCUBE PRESS-FIT</strong></td>
<td>M2.5 – M10</td>
<td>Internal Thread</td>
<td>Screwable Connection</td>
<td>Bulk</td>
<td>500 A</td>
<td>-55 °C to +150 °C</td>
</tr>
<tr>
<td></td>
<td>M3 – M10</td>
<td>External Thread</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M3 – M10 Ø3.2 – Ø8.2</td>
<td>Right Angled</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>M3 – M8 Ø3.2 – Ø10.5</td>
<td>Two Part</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>REDCUBE PLUG</strong></td>
<td>Cable Cross Section: 4 mm² – 16 mm²</td>
<td>–</td>
<td>Pluggable Connection</td>
<td>Bulk</td>
<td>120 A</td>
<td>-45 °C to +125 °C</td>
</tr>
<tr>
<td><strong>REDCUBE SMD</strong></td>
<td>M3 – M5</td>
<td>Internal Thread</td>
<td>Screwable Connection</td>
<td>Bulk, Tape &amp; Reel</td>
<td>70 A</td>
<td>-55 °C to +150 °C</td>
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<tr>
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<td>M3 – M4</td>
<td>External Thread</td>
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</tr>
<tr>
<td></td>
<td>M3 Ø3.3</td>
<td>Right Angled</td>
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<tr>
<td><strong>REDCUBE THR</strong></td>
<td>M3 – M5</td>
<td>Internal Thread</td>
<td>Screwable Connection</td>
<td>Bulk, Tape &amp; Reel</td>
<td>85 A</td>
<td>-55 °C to +150 °C</td>
</tr>
<tr>
<td></td>
<td>M3 – M5</td>
<td>External Thread</td>
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</tr>
</tbody>
</table>

*Operating current is defined by the PCB, cross section of the cable and cable lug. Suggested cable cross section according to VDE 0100.*