Printed-circuit board connector - DMCV 1,5/ 3-G1F-3,5-LR P35 - 1053973

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PCB headers, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 6, Number of rows: 2, Number of positions per row: 3, number of connections: 6, product range: DMCV 1,5/...-G1F, pitch: 3.5 mm, mounting: Wave soldering, solder pin [P]: 3.5 mm, Stecksystem: MINI COMBICON - DFMC 1,5, Locking: Snap-in locking, type of packaging: packed in cardboard

The figure shows a 2-pos. version with 4 contacts

Your advantages
- Automatic locking and intuitive release through Lock and Release operating lever in contrasting color
- Conductor connection on several levels enables higher contact density
- Small component size for applications where space is at a premium
- Vertical connection enables multi-row arrangement on the PCB

Key Commercial Data

<table>
<thead>
<tr>
<th>Packing unit</th>
<th>50 pc</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTIN</td>
<td>4055626687773</td>
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</tbody>
</table>

Technical data

<table>
<thead>
<tr>
<th>Item properties</th>
<th>Feed-through header</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief article description</td>
<td>MINI COMBICON - DFMC 1,5</td>
</tr>
<tr>
<td>Plug-in system</td>
<td>Male connector</td>
</tr>
<tr>
<td>Range of articles</td>
<td>DMCV 1,5/...-G1F</td>
</tr>
<tr>
<td>Pitch</td>
<td>3.5 mm</td>
</tr>
<tr>
<td>Number of positions</td>
<td>3</td>
</tr>
<tr>
<td>Mounting type</td>
<td>Wave soldering</td>
</tr>
<tr>
<td>Number of levels</td>
<td>2</td>
</tr>
<tr>
<td>Number of connections</td>
<td>6</td>
</tr>
<tr>
<td>Number of potentials</td>
<td>6</td>
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</tbody>
</table>
### Printed-circuit board connector - DMCV 1,5/ 3-G1F-3,5-LR P35 - 1053973

#### Technical data

#### Electrical parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal current</td>
<td>8 A</td>
</tr>
<tr>
<td>Nom. voltage</td>
<td>160 V</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>160 V</td>
</tr>
<tr>
<td>Rated voltage (III/2)</td>
<td>160 V</td>
</tr>
<tr>
<td>Rated voltage (II/2)</td>
<td>250 V</td>
</tr>
<tr>
<td>Rated surge voltage (III/3)</td>
<td>2.5 kV</td>
</tr>
<tr>
<td>Rated surge voltage (III/2)</td>
<td>2.5 kV</td>
</tr>
<tr>
<td>Rated surge voltage (II/2)</td>
<td>2.5 kV</td>
</tr>
</tbody>
</table>

#### Material data - contact

| Note                                           | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201 |
| Contact material                              | Cu alloy                                      |
| Surface characteristics                       | Tin-plated                                    |
| Metal surface contact area (top layer)        | Tin (4 - 8 µm Sn)                            |
| Metal surface contact area (middle layer)     | Nickel (1.5 - 4 µm Ni),                      |
| Metal surface soldering area (top layer)      | Tin (4 - 8 µm Sn)                            |
| Metal surface soldering area (middle layer)   | Nickel (1.5 - 4 µm Ni)                       |

#### Material data - housing

| Housing color       | green (6021) |
| Insulating material | PBT           |
| Insulating material group | IIIa        |
| CTI according to IEC 60112 | 225         |
| Flammability rating according to UL 94       | V0           |

#### Dimensions for the product

<table>
<thead>
<tr>
<th>Caption</th>
<th>Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length [ l ]</td>
<td>10.6 mm</td>
</tr>
<tr>
<td>Width [ w ]</td>
<td>17.5 mm</td>
</tr>
<tr>
<td>Height [ h ]</td>
<td>13.5 mm</td>
</tr>
<tr>
<td>Pitch</td>
<td>3.5 mm</td>
</tr>
<tr>
<td>Height (without solder pin)</td>
<td>10 mm</td>
</tr>
<tr>
<td>Solder pin [P]</td>
<td>3.5 mm</td>
</tr>
<tr>
<td>Pin spacing</td>
<td>5.50 mm</td>
</tr>
<tr>
<td>Pin dimensions</td>
<td>0.8 x 0.8 mm</td>
</tr>
</tbody>
</table>

#### Dimensions for PCB design

| Hole diameter | 1.2 mm |
| Pin spacing   | 5.50 mm |

#### Packaging information

| Type of packaging | packed in cardboard |
### Printed-circuit board connector - DMCV 1,5/ 3-G1F-3,5-LR P35 - 1053973

#### Technical data

### Packaging information

<table>
<thead>
<tr>
<th>Pieces per package</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denomination packing units</td>
<td>Pcs.</td>
</tr>
</tbody>
</table>

### Ambient conditions

| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 100 °C (dependent on the derating curve) |

### Air clearances and creepage distances

| Clearances and creepage distances | IEC 60664-1:2007-04 |
| Specification | IEC 60664-1:2007-04 |
| Minimum clearance - inhomogeneous field (III/3) | 1.5 mm |
| Minimum clearance - inhomogeneous field (III/2) | 1.5 mm |
| Minimum clearance - inhomogeneous field (II/2) | 1.5 mm |
| Minimum creepage distance value (III/3) | 2.5 mm |
| Minimum creepage distance value (III/2) | 1.6 mm |
| Minimum creepage distance value (II/2) | 2.5 mm |

### Mechanical tests (A)

| Test specification | IEC 61984 |
| Insertion strength per pos. approx. | 3 N |
| Withdraw strength per pos. approx. | 2 N |
| Polarization when inserted requirement >20 N | Test passed |
| Contact holder in insert requirements >20 N | Test passed |

### Durability tests (B)

| Specification | IEC 60512-9-1:2010-03 |
| Contact resistance $R_1$ | 2.3 mΩ |
| Insertion/withdrawal cycles | 25 |
| Contact resistance $R_2$ | 2.6 mΩ |
| Impulse withstand voltage at sea level | 2.95 kV |
| Power-frequency withstand voltage | 1.39 kV |

### Thermal tests (C)

| Specification | IEC 60512-5-1:2002-02 |
| Number of positions | 20 |
| Conductor cross section | 1.5 mm² |
| Test current | 8 A |
| Upper limiting temperature requirements <100 °C | Test passed |

### Climatic tests (D)

| Specification | ISO 6988:1985-02 |
| Cold stress | -40 °C/2 h |
| Thermal stress | 105 °C/168 h |
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Technical data

Climatic tests (D)

<table>
<thead>
<tr>
<th>Corrosive stress</th>
<th>0.2 dm³ SO₂ on 300 dm³/40 °C/1 cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulse withstand voltage at sea level</td>
<td>2.95 kV</td>
</tr>
<tr>
<td>Power-frequency withstand voltage</td>
<td>1.39 kV</td>
</tr>
</tbody>
</table>

Environmental and durability tests (E)

<table>
<thead>
<tr>
<th>Specification</th>
<th>IEC 61984:2008-10</th>
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<tbody>
<tr>
<td>Result, degree of protection, IP code</td>
<td>Finger safety with IP20 test finger</td>
</tr>
</tbody>
</table>

Vibration test

<table>
<thead>
<tr>
<th>Specification</th>
<th>IEC 60068-2-6:2007-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result</td>
<td>Test passed</td>
</tr>
<tr>
<td>Frequency</td>
<td>10 - 150 - 10 Hz</td>
</tr>
<tr>
<td>Sweep speed</td>
<td>1 octave/min</td>
</tr>
<tr>
<td>Amplitude</td>
<td>0.35 mm (10 - 60.1 Hz)</td>
</tr>
<tr>
<td>Acceleration</td>
<td>5 g (60.1 - 150 Hz)</td>
</tr>
<tr>
<td>Test duration per axis</td>
<td>2.5 h</td>
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Standards and Regulations

<table>
<thead>
<tr>
<th>Connection in acc. with standard</th>
<th>EN-VDE</th>
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<tbody>
<tr>
<td>Flammability rating according to UL 94</td>
<td>V0</td>
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</tbody>
</table>

Drawings

Diagram

Type: DFMC 1,5/...-ST-3,5-LR with DMCV 1,5/...-G1F-3,5-LR P35
Printed-circuit board connector - DMCV 1,5/3-G1F-3,5-LR P35 - 1053973

Use of the CP-DMC... coding profile

Classifications

eCl@ss

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<td>9.0</td>
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ETIM

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<td>7.0</td>
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Approvals

Approvals

Approvals

EAC / cULus Recognized

Ex Approvals

Approval details

<table>
<thead>
<tr>
<th>EAC</th>
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<table>
<thead>
<tr>
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<th>E60425-20110128</th>
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</thead>
<tbody>
<tr>
<td>Nominal voltage UN</td>
<td>300 V</td>
<td>300 V</td>
</tr>
<tr>
<td>Nominal current IN</td>
<td>8 A</td>
<td>8 A</td>
</tr>
</tbody>
</table>

Accessories

Additional products

Printed-circuit board connector - DFMC 1,5/ 3-STF-3,5 - 1790302

Plug, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3 with 6 contacts, pitch: 3.5 mm, connection method: spring-cage connection, color: green, contact surface: tin

Printed-circuit board connector - DFMC 1,5/ 3-ST-3,5-LR - 1790496

Plug, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 3 with 6 contacts, pitch: 3.5 mm, connection method: spring-cage connection, color: green, contact surface: tin