**TMC SERIES**

**0.5mm PITCH CONNECTOR FOR MICRO COAXIAL CABLE / FOR HIGH-SPEED DIFFERENTIAL TRANSMISSION**

**FEATURES**

- Applied for high speed differential transmission (TMDS, LVDS)
- Provided with a soldered cable connection.
- For micro coaxial cable (#40 AWG).
- Equipped with a metal shell, noise reduction and product strength are ensured.
- Multiple ground terminals are provided for enhanced transmission characteristics and EMS protection.
- Highly reliable design with effective mating length of 1.0mm (0.039”).
- Provided with a locking mechanism for secure locking and easy insertion/release.

*Additional common ground bar can be applied to provide a more stabilized transmission characteristic. Please contact your local KEL sales office.*

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**ORDER CODE**

**TMC01-51**

1. **Type**: TMC01: Receptacle (PCB side connector)
2. **Number of contacts**: 51: 51 pin
3. **Contact tail style**: L: Right angle S: Straight
4. **Number of packing**: A: 500pcs./1 reel B: 1000pcs./1 reel

*Please order in multiples of the quantity per package.*

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**ORDER CODE**

**TMC21-51-1**

1. **Type**: TMC21: Plug (cable side connector)
2. **Number of contacts**: 51: 51 pin
3. **Lock style**: 1

*Please order in multiples of the quantity per package.*

Plugs (cable side connector) are composed of base and shell.

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**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Material and plating</th>
<th>Electrical Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulator material: Glass-filled LCP(UL94V-0), Black</td>
<td>Current rating: 0.3A per contact</td>
</tr>
<tr>
<td>Contact material: Copper alloy</td>
<td>Contact resistance: 50mΩ max.</td>
</tr>
<tr>
<td>Contact plating: Gold over Nickel</td>
<td>Dielectric withstanding voltage: 200V AC for 1 minute</td>
</tr>
<tr>
<td>Shell material: TMC01/TMC21BASE Copper alloy</td>
<td>Insulation resistance: 100MΩ min. at 250V DC</td>
</tr>
<tr>
<td>Shell plating: TMC01/TMC21BASE Pure Tin over Nickel</td>
<td>Operating temperature: -40°C to +85°C</td>
</tr>
<tr>
<td>Plug upper shell material: TMC21COVER Stainless steel (No plating)</td>
<td>Recommended cable: #40 AWG Micro coaxial cables</td>
</tr>
<tr>
<td>Adsorption tape material: TMC01 S type Polyimide</td>
<td></td>
</tr>
</tbody>
</table>

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**Mating Drawing**

**Horizontal Mating**

**Vertical Mating**

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**B.C.E. srl.**

Via Regina Pacis, 54/c - I 41049 Sassuolo (MO)
Tel.: (+39) 0536 811616 - Fax: (+39) 0536 811500
e-mail: bce@bce.it - Website: www.bce.it
TMC01-51L-□ (Receptacle, PCB side connector, Right angle)

Printed Circuit Board Layout (Component Side View)

Ground Installation

Product Table / Dimensions

<table>
<thead>
<tr>
<th>No. of contacts</th>
<th>Part Number</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>TMC01-51L- □</td>
<td>36.94</td>
<td>35.34</td>
<td>32.94</td>
<td>25</td>
<td>0</td>
<td>28</td>
<td>15</td>
<td>36.8</td>
</tr>
</tbody>
</table>

*“n” is number of contacts.*
TMC21-51-1 (Plug, Cable side connector)

Unit: mm (inch)

**Product Table**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMC21-51-1</td>
<td>37 (1.457)</td>
<td>35.6 (1.402)</td>
<td>32.76 (1.291)</td>
<td>25</td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

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<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMC21-51-1</td>
<td>37.24 (1.466)</td>
<td>35.06 (1.380)</td>
<td>28.78 (1.133)</td>
<td>25.2 (0.992)</td>
<td>20.5 (0.807)</td>
<td>5</td>
</tr>
</tbody>
</table>

*TMC21-51 BASE and TMC21-51SHELLP2 are component parts of TMC21-51-1.

"n" is number of contacts

X-X’ Cross Section

**Product Table / Dimensions**

<table>
<thead>
<tr>
<th>No. of contacts</th>
<th>Part Number</th>
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<th>C</th>
<th>D</th>
<th>E</th>
<th>Number of packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>TMC21-51-1</td>
<td>37 (1.457)</td>
<td>35.6 (1.402)</td>
<td>34.12 (1.343)</td>
<td>32.78 (1.291)</td>
<td>25</td>
<td>60</td>
</tr>
</tbody>
</table>

Packaging style: Tray

B.C.E. S.r.l. | Via Regina Pacis, 54/c - 141094 Susa (MO) | Tel.: (+39) 0536 811616 - Fax.: (+39) 0536 811500 | E-mail: bce@bce.it - Website: www.bce.it