MODEL: HD09-19-MSMT-TR | DESCRIPTION: HDMI RECEPTACLE

FEATURES
- HDMI 2.0
- 19 position
- tape & reel packaging
- reflow solder compatible

SPECIFICATIONS

<table>
<thead>
<tr>
<th>parameter</th>
<th>conditions/description</th>
<th>min</th>
<th>typ</th>
<th>max</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI standard</td>
<td>HDMI 2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rated voltage</td>
<td></td>
<td>40</td>
<td></td>
<td></td>
<td>Vac</td>
</tr>
<tr>
<td>rated current</td>
<td></td>
<td>0.5</td>
<td></td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>contact resistance¹</td>
<td>between terminals and mating plug</td>
<td>30</td>
<td></td>
<td></td>
<td>mΩ</td>
</tr>
<tr>
<td>insulation resistance</td>
<td>at 500 Vdc</td>
<td>100</td>
<td></td>
<td></td>
<td>MΩ</td>
</tr>
<tr>
<td>voltage withstand</td>
<td>for 1 minute</td>
<td>500</td>
<td></td>
<td></td>
<td>Vac</td>
</tr>
<tr>
<td>insertion force</td>
<td></td>
<td>4.5</td>
<td></td>
<td></td>
<td>kgf</td>
</tr>
<tr>
<td>withdrawal force</td>
<td></td>
<td>1</td>
<td>4.0</td>
<td></td>
<td>kgf</td>
</tr>
<tr>
<td>life</td>
<td></td>
<td>5,000</td>
<td></td>
<td></td>
<td>cycles</td>
</tr>
<tr>
<td>operating temperature</td>
<td></td>
<td>-25</td>
<td></td>
<td>85</td>
<td>°C</td>
</tr>
<tr>
<td>flammability rating</td>
<td>UL94V-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoHS</td>
<td>yes</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note: ¹ When measured at 20 mW / 100 mA.
² All specifications measured at 10~35°C, humidity at 45~85%, under standard atmospheric pressure, unless otherwise noted.

SOLDERABILITY

<table>
<thead>
<tr>
<th>parameter</th>
<th>conditions/description</th>
<th>min</th>
<th>typ</th>
<th>max</th>
<th>units</th>
</tr>
</thead>
<tbody>
<tr>
<td>reel storage</td>
<td>at relative humidity 85-70%</td>
<td>25</td>
<td></td>
<td>30</td>
<td>°C</td>
</tr>
<tr>
<td>reflow soldering³</td>
<td>see reflow profile</td>
<td>255</td>
<td></td>
<td>260</td>
<td>°C</td>
</tr>
</tbody>
</table>

Note: ³ It is recommended to reflow solder within 3 months from opening vacuum packaging at a temperature of 25-30°C 6 relative humidity 65-70%.

Note: ² It is recommended to reflow solder within 3 months from opening vacuum packaging at a temperature of 25-30°C 6 relative humidity 65-70%.
MECHANICAL DRAWING

units: mm
tolerance:
X. ±0.38 mm
XX ±0.25 mm
XXX ±0.20 mm
XXXX ±0.10 mm
unless otherwise specified

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
<th>PLATING/COLOR</th>
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<tbody>
<tr>
<td>insulator</td>
<td>LCP (UL94V-0)</td>
<td>black</td>
</tr>
<tr>
<td>contact</td>
<td>brass</td>
<td>contact area: gold</td>
</tr>
<tr>
<td></td>
<td></td>
<td>flash over nickel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>solder area: tin over nickel</td>
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<tr>
<td>shell</td>
<td>brass</td>
<td>nickel</td>
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</tbody>
</table>

Additional Resources: [Product Page](#)
MECHANICAL DRAWING (CONTINUED)

units: mm
PCB tolerance: ±0.05 mm
PCB thickness: 1.20 mm

<table>
<thead>
<tr>
<th>PIN</th>
<th>SIGNAL NAME</th>
<th>MATING SEQUENCE</th>
<th>PIN</th>
<th>SIGNAL NAME</th>
<th>MATING SEQUENCE</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>TMDS Data2+</td>
<td>SECOND</td>
<td>2</td>
<td>TMDS Data2 Shield</td>
<td>SECOND</td>
</tr>
<tr>
<td>3</td>
<td>TMDS Data2-</td>
<td>SECOND</td>
<td>4</td>
<td>TMDS Data+</td>
<td>SECOND</td>
</tr>
<tr>
<td>5</td>
<td>TMDS Data1 Shield</td>
<td>SECOND</td>
<td>6</td>
<td>TMDS Data-</td>
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<tr>
<td>7</td>
<td>TMDS Data0+</td>
<td>SECOND</td>
<td>8</td>
<td>TMDS Data0 Shield</td>
<td>SECOND</td>
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<tr>
<td>9</td>
<td>TMDS Data0-</td>
<td>SECOND</td>
<td>10</td>
<td>TMDS Clock+</td>
<td>SECOND</td>
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<tr>
<td>11</td>
<td>TMDS Clock Shield</td>
<td>SECOND</td>
<td>12</td>
<td>TMDS Clock-</td>
<td>SECOND</td>
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<tr>
<td>13</td>
<td>CEC</td>
<td>SECOND</td>
<td>14</td>
<td>Utility</td>
<td>SECOND</td>
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<tr>
<td>15</td>
<td>SCL</td>
<td>SECOND</td>
<td>16</td>
<td>SDA</td>
<td>SECOND</td>
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<tr>
<td>17</td>
<td>DDC/CEC Ground</td>
<td>SECOND</td>
<td>18</td>
<td>+5V Power</td>
<td>THIRD</td>
</tr>
<tr>
<td>19</td>
<td>Hot Plug Detect</td>
<td>SECOND</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SHELL/SHIELD</td>
<td>FIRST</td>
<td></td>
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Recommended PCB Layout
Top View
PACKAGING

units: mm

Reel Size: Ø380 mm
Reel QTY: 500 pcs per reel
# REVISION HISTORY

<table>
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<th>rev.</th>
<th>description</th>
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<td>1.0</td>
<td>initial release</td>
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The revision history provided is for informational purposes only and is believed to be accurate.