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**PIGTAIL CONNECTOR**

**METAL SHELL**
- High performance metal connector and PTFE wire.
- Environmentally sealed.
- Operating temperature: 150°C or 200°C.
- 9 to 100 contacts.

**IDENTIFICATION CODE**

<table>
<thead>
<tr>
<th>SERIES</th>
<th>MDA 2 51 S 4 L 050 B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MDA</strong></td>
<td>Micro-D AXON® standard series.</td>
</tr>
</tbody>
</table>

**CONNECTOR TYPE**

- **1**: Cadmium aluminium shell + potting 150°C.
- **2**: Nickel aluminium shell + potting 150°C.
- **3**: Nickel aluminium shell + potting 200°C.
- **S**: Passivated stainless steel shell + potting 200°C.

**NUMBER OF CONTACTS**
09, 15, 21, 25, 31, 37, 51, 51DR, 100.

*See pages 16 & 17 for contact arrangements.*

**CONNECTOR GENDER**

- **P**: Male (pin contacts).
- **S**: Female (socket contacts).

**WIRE TYPE**

For colour codes F, L, W

- **1**: E 2607, AWG 26, 7 strands, 600V.
- **4**: E 2619, AWG 26, 19 strands, 600V.
- **6**: E 2607, AWG 28, 7 strands, 600V.
- **B**: E 3007, AWG 30, 7 strands, 600V.
- **A**: E 2407, AWG 24, 7 strands, 600V.
- **C**: E 2419, AWG 24, 19 strands, 600V.
- **E**: M22759/33, AWG 26, 19 strands, 600V.

For colour code V only

- **3**: M22759/11, AWG 26, 19 strands, 600V.
- **F**: E2607, AWG 26, 7 strands, 600V.
- **G**: AWG 25 gold plated.
- **T**: AWG 24 tin plated.

*See page 19 for wire types.*

**COLOUR CODE**

- **F**: All yellow.
- **L**: All white.
- **W**: 10 colour repeat.
- **V**: MIL-STD-681 striped (only for wire types 3 and F).

*See page 20 for colour code.*

**WIRE LENGTH (cm)**

Attention! Wire length in centimetres - (1cm = 10mm = 0.394”).

<table>
<thead>
<tr>
<th>L in cm (inches)</th>
<th>L ≤ 10</th>
<th>10 &lt; L ≤ 39.40</th>
<th>L &gt; 39.40</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLERANCE in cm (inches)</td>
<td><strong>-0 / +0.5</strong></td>
<td><strong>-0 / +3</strong></td>
<td><strong>-0 / +5</strong></td>
</tr>
<tr>
<td><strong>-0 / +0.200</strong></td>
<td><strong>-0 / +1.180</strong></td>
<td><strong>-0 / +1.970</strong></td>
<td></td>
</tr>
</tbody>
</table>

**HARDWARE**

- **B**: No hardware.
- **C**: U-clips with low profile hex skt head jack screws (removable).
- **D**: U-clips with low profile slot head jack screws (removable).
- **M**: Low profile hex skt head jack screws (removable).
- **N**: High profile hex skt head jack screws (removable).
- **S**: Low profile slot head jack screws (removable).
- **T**: High profile slot head jack screws (removable).
- **P**: Jackposts (removable).
- **K**: High profile slot head jack screws (non-removable).
- **L**: Low profile hex skt head jack screws (non-removable).
- **F**: Float mount (non-removable).

**METAL CONNECTORS ARE SUPPLIED WITH ANTI-STATIC PROTECTIVE DUST CAPS**

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www.axon-cable.com - www.microd-connectors.com
### Standard Micro-D Connectors

**Dimensions**
Dimensions are in millimetres (inches).

#### Male connector

<table>
<thead>
<tr>
<th>A ± 0.25 (±.010)</th>
<th>B max.</th>
<th>C -0.48/+0.25 (-.018/+,.010)</th>
<th>D ± 0.13 (±.005)</th>
<th>E ± 0.25 (±.010)</th>
<th>F max.</th>
<th>G max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>9 P / 9 S</td>
<td>19.69</td>
<td>.775</td>
<td>8.48</td>
<td>.334</td>
<td>10.16</td>
<td>.400</td>
</tr>
<tr>
<td>21 P / 21 S</td>
<td>27.31</td>
<td>1.075</td>
<td>16.10</td>
<td>.624</td>
<td>17.81</td>
<td>.701</td>
</tr>
<tr>
<td>25 P / 25 S</td>
<td>29.85</td>
<td>1.175</td>
<td>18.64</td>
<td>.734</td>
<td>20.35</td>
<td>.801</td>
</tr>
<tr>
<td>31 P / 31 S</td>
<td>33.66</td>
<td>1.275</td>
<td>22.45</td>
<td>.884</td>
<td>24.16</td>
<td>.951</td>
</tr>
<tr>
<td>37 P / 37 S</td>
<td>37.47</td>
<td>1.475</td>
<td>26.26</td>
<td>1.034</td>
<td>27.96</td>
<td>1.101</td>
</tr>
<tr>
<td>51DR P / 51DR S</td>
<td>46.36</td>
<td>1.825</td>
<td>35.15</td>
<td>1.384</td>
<td>36.83</td>
<td>1.450</td>
</tr>
<tr>
<td>100 P / 100 S</td>
<td>54.86</td>
<td>2.160</td>
<td>35.15</td>
<td>1.384</td>
<td>36.86</td>
<td>1.451</td>
</tr>
</tbody>
</table>

#### Female connector

<table>
<thead>
<tr>
<th>A ± 0.25 (±.010)</th>
<th>B max.</th>
<th>C -0.48/+0.25 (-.018/+,.010)</th>
<th>D ± 0.13 (±.005)</th>
<th>E ± 0.25 (±.010)</th>
<th>F max.</th>
<th>G max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
</tbody>
</table>

**Summary of Characteristics**

**Electrical & Mechanical Performance**
- **Current Rating**: 3 A max.
- **Contact Resistance**: 8 mΩ max.
- **Insulation Resistance**: 5000 MΩ min. @ 500 V DC
- **Dielectric Withstanding Voltage**: Sea level: 600 V AC; Altitude 21 km (70,000 ft): 150 V AC
- **Contact Engaging Force**: 170 g max. (6 oz)
- **Contact Separating Force**: 14 g min. (0.5 oz)
- **Contact Retention**: 2.26 kg (6 lbs)
- **Durability**: 500 mating cycles min.
- **Vibration**: 20g’s – No discontinuity > 1 µs
- **Shock**: 50g’s – No discontinuity > 1 µs

**Material & Finish**
- **Shell**: Aluminium alloy 6061 or 300 series stainless steel, see ordering info for plating options
- **Moulded Insulator**: Liquid Crystal Polymer (LCP)
- **Interfacial Seal**: Fluorosilicone rubber
- **Pin Contact**: Copper and beryllium copper, gold over nickel plating
- **Socket Contact**: Copper alloy, gold over nickel plating
- **Encapsulant**: Epoxy resin
- **Hardware**: 300 series stainless steel, passivated

**See Page 15 for More Information**
**PIGTAIL CONNECTOR**

**LOW PROFILE METAL SHELL**
- High performance metal connector and PTFE wire.
- Operating temperature: 150°C or 200°C.
- 9 to 51 contacts.

**IDENTIFICATION CODE**

<table>
<thead>
<tr>
<th>SERIES</th>
<th>MDA 2 L51 S 4 L 050 B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MDA</strong>: Micro-D AXON® standard series.</td>
<td></td>
</tr>
</tbody>
</table>

**CONNECTOR TYPE**

1: Cadmium aluminium shell + potting 150°C.
2: Nickel aluminium shell + potting 150°C.
3: Nickel aluminium shell + potting 200°C.
S: Passivated stainless steel shell + potting 200°C.

**NUMBER OF CONTACTS**: L09, L15, L21, L25, L31, L37, L51

See pages 16 & 17 for contact arrangements.

**CONNECTOR GENDER**

- **P**: Male (pin contacts).
- **S**: Female (socket contacts).

**WIRE TYPE**

For colour code V only:
- 1: E 2607, AWG 26, 7 strands, 600V.
- 4: E 2619, AWG 26, 19 strands, 600V.
- 6: E 2607, AWG 30, 7 strands, 600V.
- A: E 2407, AWG 24, 7 strands, 600V.
- B: E 2419, AWG 24, 19 strands, 600V.
- E: M22759/33, AWG 26, 19 strands, 600V.

For colour code V only:
- 3: M22759/11, AWG 26, 19 strands, 600V.
- F: E 2607, AWG 26, 7 strands, 600V.
- G: AWG 25 gold plated.
- T: AWG 24 tin plated.

See page 19 for wire types.

**COLOUR CODE**

- **F**: All yellow.
- **L**: All white.
- **W**: 10 colour repeat.
- **V**: MIL-STD-681 striped (only for wire types 3 and F).

See page 20 for colour code.

**WIRE LENGTH (cm)**

Attention! Wire length in centimetres - (1cm = 0.394 inches).

<table>
<thead>
<tr>
<th>L (in cm)</th>
<th>TOLERANCE (in inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤10</td>
<td>-0/+0.5</td>
</tr>
<tr>
<td>10 &lt; L ≤ 100</td>
<td>-0/+3</td>
</tr>
<tr>
<td>L &gt; 100</td>
<td>-0/+5</td>
</tr>
</tbody>
</table>

**TOLERANCE**

<table>
<thead>
<tr>
<th>L (in cm)</th>
<th>TOLERANCE (in inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤3.94</td>
<td>-0/+0.200</td>
</tr>
<tr>
<td>3.94 &lt; L ≤ 39.40</td>
<td>-0/+1.180</td>
</tr>
<tr>
<td>L &gt; 39.40</td>
<td>-0/+1.970</td>
</tr>
</tbody>
</table>

**HARDWARE**

- **B**: No hardware.
- **C**: U-clips with low profile hex skt head jackscrews (removable).
- **D**: U-clips with low profile slot head jackscrews (removable).
- **M**: Low profile hex skt head jackscrews (removable).
- **N**: High profile hex skt head jackscrews (removable).
- **S**: Low profile slot head jackscrews (removable).
- **T**: High profile slot head jackscrews (removable).
- **P**: Jackposts (removable).
- **K**: High profile slot head jackscrews (non-removable).
- **L**: Low profile hex skt head jackscrews (non-removable).
- **F**: Float mount (non-removable).

**METAL CONNECTORS ARE SUPPLIED WITH ANTI-STATIC PROTECTIVE DUST CAPS**
### DIMENSIONS
Dimensions are in millimetres (inches).

#### MALE connector

<table>
<thead>
<tr>
<th>A ± 0.25 (±0.010)</th>
<th>B max.</th>
<th>C -0.46/+0.25 (-.018/+.010)</th>
<th>D ± 0.13 (±0.005)</th>
<th>E ± 0.25 (±0.010)</th>
<th>F max.</th>
<th>G max.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>9 P / 9 S</td>
<td>19.76</td>
<td>7.47</td>
<td>9.65</td>
<td>10.11</td>
<td>14.35</td>
<td>5.28</td>
</tr>
<tr>
<td></td>
<td>.778</td>
<td>.294</td>
<td>.380</td>
<td>.398</td>
<td>.565</td>
<td>.208</td>
</tr>
<tr>
<td>15 P / 15 S</td>
<td>23.57</td>
<td>11.28</td>
<td>13.46</td>
<td>13.92</td>
<td>18.16</td>
<td>5.28</td>
</tr>
<tr>
<td></td>
<td>.928</td>
<td>.444</td>
<td>.530</td>
<td>.548</td>
<td>.715</td>
<td>.208</td>
</tr>
<tr>
<td>21 P / 21 S</td>
<td>27.38</td>
<td>15.09</td>
<td>17.27</td>
<td>17.73</td>
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<td>5.28</td>
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<td></td>
<td>1.078</td>
<td>.504</td>
<td>.660</td>
<td>.698</td>
<td>.865</td>
<td>.208</td>
</tr>
<tr>
<td>25 P / 25 S</td>
<td>29.92</td>
<td>17.63</td>
<td>19.81</td>
<td>20.27</td>
<td>24.51</td>
<td>5.28</td>
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<tr>
<td></td>
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<td>.780</td>
<td>.798</td>
<td>.965</td>
<td>.208</td>
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<tr>
<td>31 P / 31 S</td>
<td>33.73</td>
<td>21.44</td>
<td>23.62</td>
<td>24.08</td>
<td>28.32</td>
<td>5.28</td>
</tr>
<tr>
<td></td>
<td>1.328</td>
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<td>.930</td>
<td>.948</td>
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<td>.208</td>
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<tr>
<td>37 P / 37 S</td>
<td>37.54</td>
<td>25.25</td>
<td>27.43</td>
<td>27.89</td>
<td>32.13</td>
<td>5.28</td>
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<tr>
<td></td>
<td>1.478</td>
<td>.994</td>
<td>1.080</td>
<td>1.098</td>
<td>1.265</td>
<td>.208</td>
</tr>
<tr>
<td>51 P / 51 S</td>
<td>36.27</td>
<td>23.98</td>
<td>26.16</td>
<td>26.62</td>
<td>30.86</td>
<td>6.35</td>
</tr>
<tr>
<td></td>
<td>1.428</td>
<td>.944</td>
<td>1.030</td>
<td>1.048</td>
<td>1.215</td>
<td>.250</td>
</tr>
</tbody>
</table>

#### FEMALE connector

### SUMMARY OF CHARACTERISTICS

#### ELECTRICAL & MECHANICAL PERFORMANCE
- **CURRENT RATING**: 3 A max.
- **CONTACT RESISTANCE**: 8 mΩ max.
- **INSULATION RESISTANCE**: 5000 MΩ min. @ 500 V AC
- **DIELECTRIC WITHSTANDING**: Sea level: 600 V AC
  - Altitude 21 km (70,000 ft): 150 V AC
- **CONTACT ENGAGING FORCE**: 170 g max. (6 oz)
- **CONTACT SEPARATING FORCE**: 14 g min. (0.5 oz)
- **CONTACT RETENTION**: 2.26 kg (5 lbs)
- **DURABILITY**: 500 mating cycles min.
- **VIBRATION**: 20g’s - No discontinuity > 1µs
- **SHOCK**: 50g’s - No discontinuity > 1µs

#### MATERIAL & FINISH
- **SHELL**: Aluminium alloy 6061 or 300 series stainless steel, see ordering info for plating options
- **MOULDED INSULATOR**: Liquid Crystal Polymer (LCP)
- **PIN CONTACT**: Copper and beryllium copper, gold over nickel plating
- **SOCKET CONTACT**: Copper alloy, gold over nickel plating
- **ENCAPSULENT**: Epoxy resin
- **HARDWARE**: 300 series stainless steel, passivated

SEE PAGE 15 FOR MORE INFORMATION
Standard Micro-D connectors

MDA: Micro-D AXON’ standard series.

CONNECTOR TYPE

P: LCP shell + potting 150°C.
L: LCP shell + potting 200°C.

NUMBER OF CONTACTS

09,15,21,25,31,37,51. See pages 16&17 for contact arrangements.

CONNECTOR GENDER

P: Male (pin contacts).
S: Female (socket contacts).

WIRE TYPE

For colour codes F, L, W
1: E2607, AWG 26, 7 strands, 600V.
4: E2619, AWG 26, 19 strands, 600V.
6: E2607, AWG 28, 7 strands, 600V.
8: E3007, AWG 30, 7 strands, 600V.
A: E2407, AWG 24, 7 strands, 600V.
C: E2419, AWG 24, 19 strands, 600V.
E: M22759/33, AWG 26, 19 strands, 600V.

For colour code V only
3: M22759/11, AWG 26, 19 strands, 600V.
F: E2607, AWG26, 7 strands, 600V.
G: AWG 25 gold plated.
T: AWG 24 tin plated.
See page 19 for wire types.

COLOUR CODE

F: All yellow.
BLANK: If wire type is G or T.
L: All white.
W: 10 colour repeat.
V: MIL-STD-681 striped (only for wire types 3 and F).
See page 20 for colour code.

WIRE LENGTH (cm)

Attention! wire length in centimetres - (1cm = 10mm = 0.394”).

TOLERANCE

<table>
<thead>
<tr>
<th>L (in cm)</th>
<th>L ≤ 10</th>
<th>10 &lt; L ≤ 30.40</th>
<th>30.40 &lt; L ≤ 39.40</th>
<th>L &gt; 39.40</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLERANCE</td>
<td>-0 / +0.5</td>
<td>-0 / +3</td>
<td>-0 / +3</td>
<td>-0 / +5</td>
</tr>
</tbody>
</table>

HARDWARE

B: No hardware.
C: U-clips with low profile hex skt head jackscrews (removable).
D: U-clips with low profile slot head jackscrews (removable).
M: Low profile hex skt head jackscrews (removable).
N: High profile hex skt head jackscrews (removable).
S: Low profile slot head jackscrews (removable).
T: High profile slot head jackscrews (removable).
P: Jackposts (removable).
K: High profile slot head jackscrews (non removable).
L: Low profile hex skt head jackscrews (non removable).
F: Float mount (non removable).
### DIMENSIONS
Dimensions are in millimetres (inches).

#### MALE connector

![Diagram of MALE connector]

#### FEMALE connector

![Diagram of FEMALE connector]

### SUMMARY OF CHARACTERISTICS

#### ELECTRICAL & MECHANICAL PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>A ± 0.25 (±.010)</th>
<th>B max.</th>
<th>C -0.46/+0.25 (-.018/+ .010)</th>
<th>D ± 0.13 (±.005)</th>
<th>E ± 0.25 (±.010)</th>
<th>F max.</th>
<th>G max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 P / 9 S</td>
<td>19.76 ± .778</td>
<td>7.41</td>
<td>9.65</td>
<td>10.11</td>
<td>14.35</td>
<td>5.28</td>
<td>3.40</td>
</tr>
<tr>
<td>15 P / 15 S</td>
<td>23.57 ± .928</td>
<td>11.22</td>
<td>13.46</td>
<td>13.92</td>
<td>18.16</td>
<td>5.28</td>
<td>3.40</td>
</tr>
<tr>
<td>21 P / 21 S</td>
<td>27.38 ± 1.078</td>
<td>15.03</td>
<td>17.27</td>
<td>17.73</td>
<td>21.97</td>
<td>5.28</td>
<td>3.40</td>
</tr>
<tr>
<td>25 P / 25 S</td>
<td>29.92 ± 1.178</td>
<td>17.57</td>
<td>19.81</td>
<td>20.27</td>
<td>24.51</td>
<td>5.28</td>
<td>3.40</td>
</tr>
<tr>
<td>31 P / 31 S</td>
<td>33.73 ± 1.328</td>
<td>21.38</td>
<td>23.62</td>
<td>24.08</td>
<td>28.32</td>
<td>5.28</td>
<td>3.40</td>
</tr>
<tr>
<td>37 P / 37 S</td>
<td>37.54 ± 1.478</td>
<td>25.19</td>
<td>27.43</td>
<td>27.89</td>
<td>32.13</td>
<td>5.28</td>
<td>3.40</td>
</tr>
<tr>
<td>51 P / 51 S</td>
<td>36.27 ± 1.428</td>
<td>23.92</td>
<td>26.16</td>
<td>26.62</td>
<td>30.86</td>
<td>6.35</td>
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#### MATERIAL & FINISH

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<th>MOULDED SHELL</th>
<th>PIN CONTACT</th>
<th>SOCKET CONTACT</th>
<th>ENCAPSULANT</th>
<th>HARDWARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOULDED SHELL</td>
<td>Liquid Crystal Polymer (LCP)</td>
<td>Copper and beryllium copper, gold over nickel plating</td>
<td>Copper Alloy, gold over nickel plating</td>
<td>Epoxy resin</td>
<td>300 series stainless steel, passivated</td>
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SEE PAGE 15 FOR MORE INFORMATION
# Standard Micro-D Connectors

**SERIES**

- **MDA**: Micro-D AXON® standard series.

**CONNECTOR TYPE**

- 1: Cadmium aluminium shell + potting 150°C.
- 2: Nickel aluminium shell + potting 150°C.
- 3: Nickel aluminium shell + potting 200°C.
- S: Passivated stainless steel shell + potting 200°C.

**NUMBER OF CONTACTS**

- 09, 15, 21, 25, 31, 37, 51, 51DR, 100.

See pages 16 & 17 for contact arrangements.

**CONNECTOR GENDER**

- P: Male (pin contacts).
- S: Female (socket contacts).

**SOLDER CUP HARDWARE**

- B: No hardware.
- C: U-clips with low profile hex skt head jackscrews (removable).
- D: U-clips with low profile slot head jackscrews (removable).
- M: Low profile hex skt head jackscrews (removable).
- N: High profile hex skt head jackscrews (removable).
- S: Low profile slot head jackscrews (removable).
- T: High profile slot head jackscrews (removable).
- P: Jackposts (removable).
- K: High profile slot head jackscrews (non-removable).
- L: Low profile hex skt head jackscrews (non-removable).
- F: Float mount (non-removable).

## Rectangular Connectors

**Metal Shell**

- High performance metal connector and solder cup contacts.
- Environmentally sealed.
- Ideal for prototyping or where pigtail type connectors cannot be used.
- Operating temperature: 150°C or 200°C.
- 9 to 100 contacts.

**Identification Code**

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<th>S</th>
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**Metal Connectors are supplied with anti-static protective dust caps**
### Dimensions
Dimensions are in millimetres (inches).

#### Male Connector

![Male Connector Diagram]

#### Female Connector

![Female Connector Diagram]

### Table: Dimensions

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### Summary of Characteristics

#### Electrical & Mechanical Performance

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#### Material & Finish

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See page 15 for more information
Standard Micro-D connectors

SERIES
MDA: Micro-D AXON’ standard series.

CONNECTOR TYPE
1: Cadmium aluminium shell + potting 150°C.
2: Nickel aluminium shell + potting 150°C.
3: Nickel aluminium shell + potting 200°C.
S: Passivated stainless steel shell + potting 200°C.

NUMBER OF CONTACTS
L09, L15, L21, L25, L31, L37, L51
See pages 16 & 17 for contact arrangements.

CONNECTOR GENDER
P: Male (pin contacts).
S: Female (socket contacts).

SOLDER CUP
B: No hardware.
C: U-clips with low profile hex skt head jackscrews (removable).
D: U-clips with low profile slot head jackscrews (removable).
M: Low profile hex skt head jackscrews (removable).
N: Low profile slot head jackscrews (removable).
S: Low profile slot head jackscrews (removable).
T: High profile slot head jackscrews (removable).
P: Jackposts (removable).
L: Low profile hex skt head jackscrews (non removable).
F: Float mount (non removable).

Rectangular Connectors
Solder Cup Connector
Low Profile Metal Shell
- High performance metal connector and solder cup contacts.
- Ideal for prototyping or when pigtails type connectors cannot be used.
- Operating temperature: 150°C or 200°C.
- 9 to 51 contacts.

Identification Code

MDA 2 L51 S FS B

Metal Connectors are supplied with anti-static protective dust caps.
DIMENSIONS
Dimensions are in millimetres (inches).

MALE connector

FEMALE connector

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SUMMARY OF CHARACTERISTICS

ELECTRICAL & MECHANICAL PERFORMANCE

| CURRENT RATING | 3 A max. |
| CONTACT RESISTANCE | 8 mΩ max. |
| INSULATION RESISTANCE | 5000 MΩ min. @ 500 V AC |
| DIELECTRIC WITHSTANDING VOLTAGE | Sea level: 600 V AC, Altitude 21 km (70,000 ft): 150 V AC |
| CONTACT ENGAGING FORCE | 170 g max. (6 oz) |
| CONTACT SEPARATING FORCE | 14 g min. (0.5 oz) |
| CONTACT RETENTION | 2.26 kg (5 lbs) |
| DURABILITY | 500 mating cycles min. |
| VIBRATION | 20g’s - No discontinuity > 1µs |
| SHOCK | 50g’s - No discontinuity > 1µs |

MATERIAL & FINISH

| MOULDED SHELL | Liquid Crystal Polymer (LCP) |
| PIN CONTACT | Copper and beryllium copper, gold over nickel plating |
| SOCKET CONTACT | Copper alloy, gold over nickel plating |
| SOLDER CUP | Copper alloy, gold over nickel plating |
| ENCAPSULENT | Epoxy resin |
| HARDWARE | 300 series stainless steel, passivated |

SEE PAGE 15 FOR MORE INFORMATION
## Standard Micro-D Connectors

### MDA Series

- **MDA**: Micro-D AXON standard series.

### Connector Type

- **P**: LCP shell + potting 150°C.
- **L**: LCP shell + potting 200°C.

### Number of Contacts

- 9, 15, 21, 25, 31, 37, 51.
- See pages 16 & 17 for contact arrangements.

### Connector Gender

- **P**: Male (pin contacts).
- **S**: Female (socket contacts).

### Solder Cup

- **B**: No hardware.
- **C**: U-clips with low profile hex skt head jackscrews (removable).
- **D**: U-clips with low profile slot head jackscrews (removable).
- **M**: Low profile hex skt head jackscrews (removable).
- **N**: High profile hex skt head jackscrews (removable).
- **S**: Low profile slot head jackscrews (removable).
- **T**: High profile slot head jackscrews (removable).
- **P**: Jackposts (removable).
- **K**: High profile slot head jackscrews (non removable).
- **L**: Low profile hex skt head jackscrews (non removable).
- **F**: Float mount (non removable).
SUMMARY OF CHARACTERISTICS

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**ELECTRICAL & MECHANICAL PERFORMANCE**

- **CURRENT RATING**: 3 A max.
- **CONTACT RESISTANCE**: 8 mΩ max.
- **INSULATION RESISTANCE**: 5000 MΩ min. Ø 500 V DC
- **DIELECTRIC WITHSTANDING VOLTAGE**: Sea level: 600 V AC, Altitude 21 km (70,000 ft) : 150 V AC
- **CONTACT ENGAGING FORCE**: 170 g max. (6 oz)
- **CONTACT SEPARATING FORCE**: 14 g min. (0.5 oz)
- **CONTACT RETENTION**: 2.26 kg (5 lbs)
- **DURABILITY**: 500 mating cycles min.
- **VIBRATION**: 20g’s – No discontinuity > 1 µs
- **SHOCK**: 50g’s – No discontinuity > 1 µs

**MATERIAL & FINISH**

- **MOULDED SHELL**: Liquid Crystal Polymer (LCP)
- **PIN CONTACT**: Copper and beryllium copper, gold over nickel plating
- **SOCKET CONTACT**: Copper alloy, gold over nickel plating
- **SOLDER CUP**: Copper alloy, gold over nickel plating
- **ENCAPSULANT**: Epoxy resin
- **HARDWARE**: 300 series stainless steel, passivated

---

**DIMENSIONS**

Dimensions are in millimetres (inches).

**MALE**

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<td>51 P / 51 S</td>
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**FEMALE**

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<th>A ± 0.25 (±.010)</th>
<th>B max.</th>
<th>C ± 0.46/0.25 (-.018/+.010)</th>
<th>D ± 0.13 (±.005)</th>
<th>E ± 0.25 (±.010)</th>
<th>F max.</th>
<th>G max.</th>
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<td>6.35</td>
<td>.177</td>
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SEE PAGE 15 FOR MORE INFORMATION