

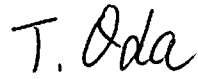
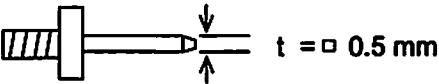
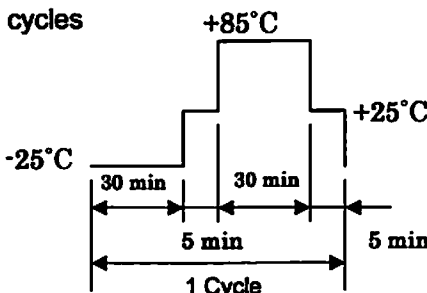


HONDA TSUSHIN KOGYO CO., LTD. Tokyo Japan		Sheet	1 of 5
		Date	Sep. 12. 2007
Product Specification LPC Series Connector ( RoHS ) 【2mm Spacing Connector】		Approved by	Checked by
		 K.Kashio	 C.Nunokawa
		Written by	 T.Oda
<u>Connector part number</u>			
Connector type	Part number	Note	
Male connector	LPC - B ( ) M2G ( ) LPC - B ( ) M2LG ( )	DIP type connector	
Female connector	LPC - B ( ) FAG ( ) LPC - B ( ) RFAG ( )	IDC type connector	
<b>Characteristics</b>			
No.	Item	Specification	
1	Current Rating	1.5 amp AC maximum per contact	
2	Voltage Rating	150 volts AC (r.m.s.)	
3	Operating Temperature	-25 °C to 85 °C	
4	Humidity	90%RH maximum	
5	Insulation Resistance	When tested in accordance with method B of MIL-STD-202F 302, the insulation resistance shall be a minimum of 1000 MΩ at 500 volts DC.	
6	Dielectric Withstanding Voltage	When tested in accordance with MIL-STD-202F 301, there shall be no breakdown of insulation or flashover at 750 volts AC (r.m.s.) for a minute.	
7	Contact Resistance	When tested in accordance with MIL-STD-1344 3002.1, contact resistance shall not exceed following values including the conductor resistance.  Initial : 20 mΩ After test : 30 mΩ	

No.	Item	Specification
8	Female Contact Insertion and Pulling Force (Individual)	<p>When tested in accordance with MIL-STD-1344 2014, female contact insertion force and pulling force shall satisfy followings.</p> <ul style="list-style-type: none"> <li>○ Insertion Force The force required to insert the test gauge into any contact shall not exceed following values. 2.94 N per contact</li> <li>○ Pulling Force The force required to pull the test gauge from any contact shall not be less than following values. 0.294 N per contact</li> </ul> 
9	Connector Insertion and Withdrawal Force (Overall)	<p>When tested in accordance with MIL-STD-1344 2013.1, connector insertion force and withdrawal force shall satisfy followings.</p> <ul style="list-style-type: none"> <li>○ Insertion Force The force required to insert a connector into the mating one shall not exceed <math>2.94 \times (n)</math> N.</li> <li>○ Withdrawal Force The force required to withdraw a connector from the mating one shall not be less than <math>0.294 \times (n)</math> N. ※ " n " shows number of contact</li> </ul>
10	Vibration	<p>When tested in accordance with MIL-STD-202 201, there shall be no physical or mechanical damage to the connector. During vibration, there shall be no discontinuity of the test circuit greater than 1 microsecond. (100 mA DC of current applied for the circuit.) After the test, there shall be no breakdown of insulation or flashover at 500 volts AC(r.m.s.) for a minute.</p> <p>Frequency range: 10 Hz to 500 Hz at 98 m/s<sup>2</sup>  Test direction: 3 axes(X, Y and Z)  Test time: 2 hours for each axis</p>

No.	Item	Specification
11	Physical Shock	<p>When tested in accordance with method C of MIL-STD-202 107, there shall be no physical or mechanical damage to the connector. During the test, there shall be no discontinuity of the test circuit greater than 1 microsecond. (100 mA DC of current applied for the circuit.) After the test, there shall be no breakdown of insulation or flashover at 500 volts AC(r.m.s.) for a minute.</p> <p>Acceleration: 490 m/s<sup>2</sup> peak            Test direction: 6 axes(±X, ±Y and ±Z)            Test cycles: 3 cycles for each axis (Total 18 cycles)</p>
12	Durability	<p>When tested in accordance with MIL-STD-1344 2016, there shall be no physical or mechanical damage to the connector. After test, contact resistance shall satisfy values as stated in item #7, female contact insertion and pulling force shall satisfy values as stated in item #8.</p> <p>Test cycles: 50 cycles</p>
13	Thermal Shock	<p>When tested in accordance with method A of MIL-STD-202 107, there shall be no physical or mechanical damage to the connector. After test, contact resistance shall satisfy values as stated in item #7, there shall be no breakdown of insulation or flashover at 500 volts AC (r.m.s.) for a minute.</p> <p>Test cycles: 5 cycles</p>  <p>The diagram illustrates a thermal shock test cycle. It starts at -25°C for 30 minutes, then rises to +85°C for 30 minutes, then drops to +25°C for 5 minutes. A 5-minute dwell period follows. This entire sequence is labeled as '1 Cycle'.</p>

No.	Item	Specification
14	Humidity	<p>When tested in accordance with method B of MIL-STD-202 103, there shall be no physical or mechanical damage to the connector.</p> <p>After the test, the insulation resistance shall be no less than 1000 MΩ , there shall be no breakdown of insulation or flashover at 750 volts AC (r.m.s.) for a minute and contact resistance shall satisfy values as stated in item #7.</p> <p>Humidity: 90~95 %  Temperature: 40 ±2 °C  Test time: 96 hours</p>
15	Salt Spray	<p>When tested in accordance with method B of MIL-STD-202 101, there shall be no any excessive corrosion on the every part of connector.</p> <p>After test, contact resistance shall satisfy values as stated in item #7.</p> <p>Salt spray concentration: 5±1 %  Temperature: 35 °C  Test time: 96 hours</p>
16	H <sub>2</sub> S Gas	<p>When tested in accordance with JIS C 0092, there shall be no any excessive corrosion on the every part of connector.</p> <p>After test, contact resistance shall satisfy values as stated in item #7.</p> <p>H<sub>2</sub>S gas concentration: 3 ppm  Temperature: 40 °C  Test Time: 48 hours</p>

No.	Item	Specification
17	High Temperature Life	<p>When tested in accordance with method A of MIL-STD-202F 108 , there shall be no physical or mechanical damage to the connector. After test, contact resistance shall satisfy values as stated in item #7. Female contact insertion and pulling force shall satisfy values as stated in item #8.</p> <p>Temperature: +85 °C Test Time: 240 hours</p>
18	Temperature Rise	<p>When 1A DC is passed through each contact of connector, the change in temperature of connectors before and after test shall not exceed 30 °C.</p>
19	Solder ability (Male connector only)	<p>When tested in accordance with MIL-STD-202F 208E , a new uniform coating of solder shall cover a minimum of 95% of the surface being immersed.</p> <p>Solder Temperature: 245±5 °C Immersion Time: 5 seconds</p>
20	Solder Heat (Male connector only)	<p>When tested in accordance with method A of MIL-STD-202F 210A, there shall be no physical or mechanical damage to the connector.</p> <p>Solder bath temperature: 260±5 °C Immersion Time:10±2 seconds</p>
21	Solvent Resistance (Male connector only)	<p>When tested in accordance with MIL-STD-202F 215E, the connector shall be capable of being cleaned by isopropyl alcohol. After test, there shall be no evidence of swelling, cracking, dissolving or any other defect.</p>
22	Contact Retention (Male connector only)	<p>When a force of 4.9 N is applied to any contact in direction along the axis of retention, there shall be no damage or losing of the contact.</p>