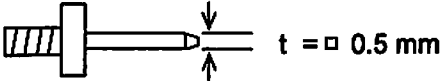
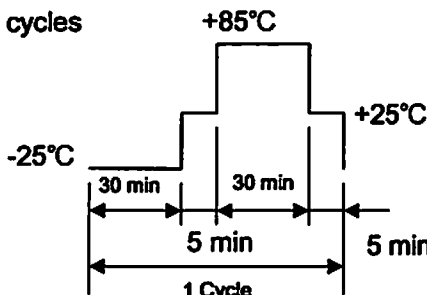


HTK HONDA TSUSHIN KOGYO CO., LTD		Sheet	1 of 5
		Date	Sep 2. 2013
Product Specification LPC Series Connector (Crimping Connector)		Approved by <i>K. Tashiro</i>	Checked by <i>M. Kasahara</i>
		Written by <i>A. Tashiro</i>	
<u>Connector part number</u>			
Connector type	Part number	Note	Insulation dia. range
Contact	LPC-F103S	AWG#32	0.6
	LPC-F103N	AWG#28~32	0.7~1.0
	LPC-F103L	AWG#22~26	0.9~1.1
Applicable female insulator	LPC - () FS01, F02		
Matting male connector	LPC-() MG, MLG, M2G, M2LG		
<u>Characteristics</u>			
No.	Item	Specification	
1	Current Rating	1 A maximum per contact	
2	Voltage Rating	125 V 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 V DC.	
6	Dielectric Withstanding Voltage	When tested in accordance with MIL-STD-202F 301, there shall be no breakdown of insulation or flashover at 500 V AC (r.m.s.) for a minute.	
7	Contact Resistance	When tested in accordance with JIS C 5402 5.4, contact resistance shall not exceed following values including the cable conductor resistance. (30mm length) Initial : 40 mΩ	

No.	Item	Specification
8	Female Contact Insertion and Pulling Force (Individual)	<p>When tested in accordance with JIS C5402 6.4, female contact insertion force and pulling force shall satisfy followings.</p> <ul style="list-style-type: none"> ○ Insertion Force The force required to insert the test gauge into any contact shall not exceed following values. 2.94 N per contact ○ 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 
9	Connector Insertion and Withdrawal Force (Overall)	<p>When tested in accordance with JIS C5402 6.6, connector insertion force and withdrawal force shall satisfy followings.</p> <ul style="list-style-type: none"> ○ Insertion Force The force required to insert a connector into the mating one shall not exceed $2.94 \times (n)$ N. ○ Withdrawal Force The force required to withdraw a connector from the mating one shall not be less than $0.294 \times (n)$ N. ※ "n" shows number of contact
10	Vibration	<p>When tested in accordance with method A of MIL-STD-202F 204D, there shall be no physical or mechanical damage to the connector. During vibration, there shall be no discontinuity of the test circuit greater than 10 μ s. (100 mA DC of current applied for the circuit.)</p> <p>Frequency range: 10 Hz to 500 Hz at 1.52mm or 98 m/s² 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 A of MIL-STD-202F 213B, 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 10 μ s. (100 mA DC of current applied for the circuit.)</p> <p>Acceleration: 490 m/s² peak Test direction: 6 axes(\pmX, \pmY and \pmZ) Test cycles: 3 cycles for each axis (Total 18 cycles)</p>
12	Durability	<p>When tested in accordance with JIS C5402 6.3, there shall be no physical or mechanical damage to the connector. After test, contact resistance shall not exceed ' 50mΩ ' including the cable conductor resistance. (30mm length)</p> <p>Test cycles: 50 cycles</p>
13	Thermal Shock	<p>When tested in accordance with JIS C5402 7.2, there shall be no physical or mechanical damage to the connector.</p> <p>Test cycles: 5 cycles</p>  <p>The diagram illustrates a thermal shock test cycle. It shows a temperature profile with three levels: -25°C, +85°C, and +25°C. The temperature starts at -25°C and remains there for 30 minutes. It then rises to +85°C and remains there for 30 minutes. Finally, it falls to +25°C and remains there for 5 minutes. The total duration of one cycle is 1 cycle. The diagram also shows a 5-minute dwell time at +25°C before the next cycle begins.</p>

No.	Item	Specification
14	Humidity	<p>When tested in accordance with method B of MIL-STD-202F 103B, there shall be no physical or mechanical damage to the connector. After the test, the insulation resistance shall be more than 1000 MΩ , there shall be no breakdown of insulation or flashover at 500 VAC (r.m.s.) for a minute and contact resistance shall not exceed ' 50mΩ ' including the cable conductor resistance. (30mm length)</p> <p>Humidity: 90~95 % Temperature: + 40 °C Test time: 96 hours</p>
15	Salt Spray	<p>When tested in accordance with method B of MIL-STD-202F 101D, there shall be no any excessive corrosion on the every part of connector. After test, contact resistance shall not exceed ' 50mΩ ' including the cable conductor resistance. (30mm length)</p> <p>Salt spray concentration: 5% Test time: 48 hours</p>
16	H ₂ S Gas	<p>When tested in accordance with JIS C 0092, there shall be no any excessive corrosion on the every part of connector. After test, contact resistance shall not exceed ' 50mΩ ' including the cable conductor resistance. (30mm length)</p> <p>H₂S gas concentration: 3 ppm Temperature: +40°C Test time: 96 hours</p>

No.	Item	Specification
17	High Temperature	<p>After tested in accordance with method A of MIL-STD-202F 108A , there shall be no physical or mechanical damage to the connector and contact resistance shall not exceed ' 50mΩ ' including the cable conductor resistance. (30mm length)</p> <p>Temperature: +85 °C Test time: 96 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	Solderability	<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°C Immersion time: 5 seconds</p>
20	Solder Heat	<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°C Immersion time:10 seconds</p>
21	Solvent Resistance	<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	<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 loosening of the contact.</p>