HONDA TSUSHIN KOGYO CO., LTD. Tokyo Japan	Sheet	1 of 5	
	Date	Jun 30. 2004	
Product Specification LPC Series Connector (2mm Spacing Board Connector)	Approved by	Checked by	Written by
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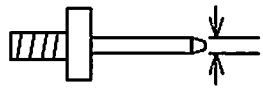
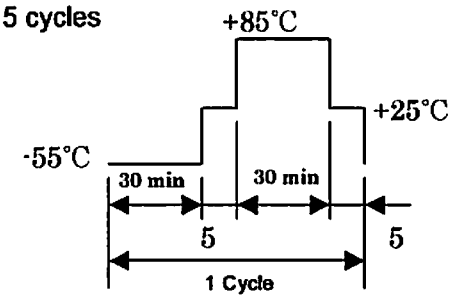
Connector part number

Connector type	Part number	Note
Male connector	LPC - ( ) MG,M2G	Straight DIP type connector
Female connector	LPC - ( ) FDSG,FDG	Straight DIP type connector

Characteristics

No.	Item	Specification
1	Current Rating	1 amp AC maximum per contact
2	Voltage Rating	125 volts AC (r.m.s.)
3	Operating Temperature	-25 ℃ to 85 ℃
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 500 volts 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 conductor resistance. Initial : 20 mΩ After test : 30 mΩ

No.	Item	Specification
8	Female Contact Insertion and Pulling Force (Individual)	When tested in accordance with JIS C5402 6.4, female contact insertion force and pulling force shall satisfy followings. o Insertion Force The force required to insert the test gauge into any contact shall not exceed following values. 1.96 N per contact o Pulling Force The force required to pull the test gauge from any contact shall not be less than following values. 0.196 N per contact  t = □ 0.5 mm
9	Connector Insertion and Withdrawal Force (Overall)	When tested in accordance with JIS C5402 6.6, connector insertion force and withdrawal force shall satisfy followings. o Insertion Force The force required to insert a connector into the mating one shall not exceed 1.96 × (n) N. o Withdrawal Force The force required to withdraw a connector from the mating one shall not be less than 0.196 × (n) N. ※" n" shows number of contact
10	Vibration	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 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. Frequency range: 10 Hz to 500 Hz at 98 m/s^2 Test direction: 3 axes(X, Y and Z) Test time: 2 hours for each axis

No.	Item	Specification
11	Physical Shock	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 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. Acceleration: 490 m/s² peak Test direction: 6 axes(±X, ±Y and ±Z) Test cycles: 3 cycles for each axis (Total 18 cycles)
12	Durability	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 satisfy values as stated in item #8, female contact insertion and pulling force shall satisfy values as stated in item #9 and connector insertion force and withdrawal force shall satisfy values as stated in item #10 . Test cycles: 50 cycles
13	Thermal Shock	When tested in accordance with JIS C5402 7.2, there shall be no physical or mechanical damage to the connector. After test, there shall be no breakdown of insulation or flashover at 500 volts AC (r.m.s.) for a minute. Test cycles: 5 cycles 

No.	Item	Specification
14	Humidity	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 no less than 1000 MΩ, there shall be no breakdown of insulation or flashover at 500 volts AC (r.m.s.) for a minute and contact resistance shall satisfy values as stated in item #8. Humidity: 90~95 % Temperature: + 40 ℃ Test time: 96 hours
15	Salt Spray	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 satisfy values as stated in item #8. Salt spray concentration: 5±1 % Temperature: + 35 ℃ Test time: 48 hours
16	H_2S Gas	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 satisfy values as stated in item #8. H_2S gas concentration: 3 ppm Temperature: + 40±2 ℃ Test Time: 96 hours

No.	Item	Specification
17	High Temperature Life	When tested in accordance with method A of MIL-STD-202F 108A , there shall be no physical or mechanical damage to the connector. After test, contact resistance shall satisfy values as stated in item #8. Female contact insertion and pulling force shall satisfy values as stated in item #9. Temperature: +85 ℃ Test Time: 96 hours
18	Temperature Rise	When 1A DC is passed through each contact of connector, the change in temperature of connectors before and after test shall not exceed 30 ℃.
19	Solderability	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. Solder Temperature: 245±5 ℃ Immersion Time: 5 seconds
20	Solder Heat	When tested in accordance with method A of MIL-STD-202F 210A, there shall be no physical or mechanical damage to the connector. Solder bath temperature: 260±5 ℃ Immersion Time:10±2 seconds
21	Solvent Resistance	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.
22	Contact Retention	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 loosing of the contact.