HONDA TSUSHIN KOGYO CO., LTD. TOKYO JAPAN	SHEET	1 OF 4	
	DATE	Dec.5.2005	
PRODUCT SPECIFICATION 0.8mm SPACING HIGH DENSITY CONNECTOR FOR BOARD TO BOARD & BOARD TO CABLE.	APPROVED BY	CHECKED BY	WRITTEN BY
	H.EBIHARA	C.NUNOKAWA	Y.KATO

CONNECTOR PART NO.

TYPE			PART NO.	NOTE
Board to Board		Female	HDR-EA( )LFYPG1+	Right angle SMT connector with hold-down (Recommended screw tighten torque to fix it on p.c.board : 0.2～0.25N· m)
		Male	HDR-EA( )LMYPG1+	
Board to Cable	Board side	Female	HDR-EA( )LFY( )G1-SLE+	Right angle SMT connector with locking post and hold-down
		Male	HDR-EA( )LMY( )G1-SLE+	
	Cable side	Female	HDR-E( )FAG1+	IDC type connector Wire accommodation size : #30 AWG (7/0.1) O.D 0.5～0.65
		Male	HDR-E( )MAG1+	
	Cable cover		HDR-E( )LPA	Shielded cover with shell, boot ease and locking clip

○How to order the connector for p.c. board with the embossed tape container.

The correct part number join "-TP" to the end of connector part number.
(HDR-EA( )LFYPG1-SLE-TP,etc.)
Number of connectors in a package : 450 pieces

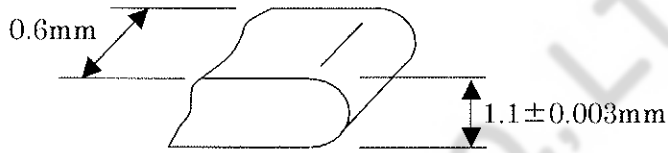
CHARACTERISTICS

No.	ITEM	SPECIFICATION
1	Current Rating	0.5 amp DC maximum, per contact
2	Voltage Rating	125 volts AC (r.m.s.)
3	Operating Temperature	-55℃～105℃(Board to Board type), -40℃～70℃(Board to Cable type)
4	Storage Temperature	-55℃～105℃(Board to Board type), -40℃～70℃(Board to Cable type)
5	Humidity	85%RH maximum
6	Insulation Resistance	When tested in accordance with Method 302 of MIL-STD-202F, the insulation resistance shall be a minimum of 1000 MΩ at 250 volts DC.
7	Dielectric Withstanding Voltage	When tested in accordance with Method 301 of MIL-STD-202F, there shall be no breakdown of insulation or flashover at 350 volts AC (r.m.s.) for a minute.
8	Contact Resistance	When tested in accordance with Method 3004 of MIL-STD-1344, the contact resistance shall not exceed 70mΩ including the conductor resistance.

LTR.	DATE	BY	REV.DESCRIPT	APPR.
/	Dec.6.2005	Y.Kato	Revise	H. Ebihara

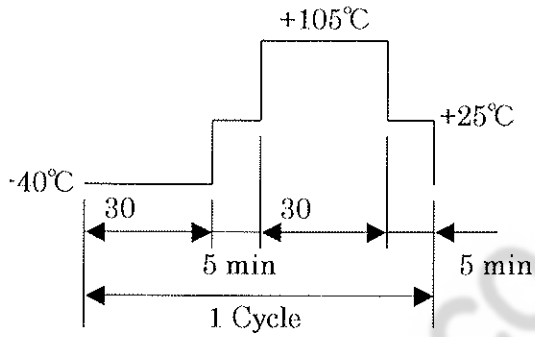
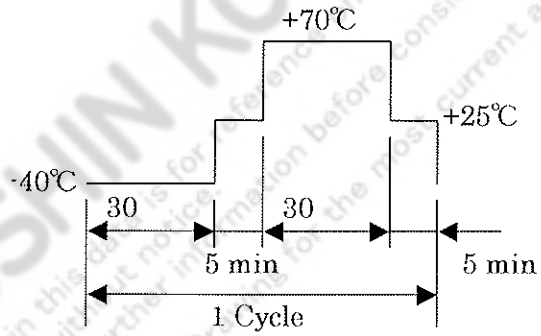
<table>
<tr><th>No.</th><th>ITEM</th><th>SPECIFICATION</th></tr>
<tr><td>9</td><td>Female Contact Insertion and Pulling Force (Individual)</td><td>○Insertion Force
The force required to insert the test gage into any contact shall not exceed 2.45 N per contact.

○Pulling Force
The force required to pull the test gage from any contact shall not be less than 0.294 N per contact.

 
</td></tr>
<tr><td>10</td><td>Connector Insertion and Withdrawal Force (Overall)</td><td>○Insertion Force
The force required to insert a connector into the mating one shall not exceed the values in the below table.

○Withdrawal Force
The force required to withdraw a connector from the mating one shall not be less than the values in the below table.

UNIT : N
<table>
<tr><th>No. of pos.</th><th>Insertion Force</th><th>Withdrawal Force</th></tr>
<tr><td>14</td><td>24.5 max.</td><td>2.0 min.</td></tr>
<tr><td>26</td><td>39.2 max.</td><td>3.5 min.</td></tr>
<tr><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td>11</td><td>Durability</td><td>When subjected to 5000 cycles of insertion and withdrawal forces with mating connector at the rate of 600 cycles per hours, there shall be no evidence damage to the connectors such as cracking. After test, the contact resistance shall not exceed 70m Ω.</td></tr>
<tr><td>12</td><td>Vibration</td><td>When tested in accordance with Method 204D of MIL-STD-202F, Test Condition A, 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.)</td></tr>
<tr><td>13</td><td>Shock</td><td>When tested in accordance with Method 213B of MIL-STD-202F, Test Condition A, 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.)</td></tr>
<tr><td>14</td><td>Humidity Temperature Cycling (Except Cable Cover For Cable Connector)</td><td>When tested in accordance with Method 106E of MIL-STD-202F, after the test, the insulation resistance shall be no less than 500 MΩ, there shall be no breakdown of insulation or flashover at 350 volts AC (r.m.s.) for a minute and the contact resistance shall not exceed 70m Ω.</td></tr>
</table>

No.	ITEM	SPECIFICATION
15	Thermal Shock	○Board to Board Type When subjected to 25 cycles in such environment as shown below program, there shall be no evidence of cracking or crazing of the body or other physical damage to the connector. After test, the contact resistance shall not exceed 70 mΩ.  ○Board to Cable Type When subjected to 25 cycles in such environment as shown below program, there shall be no evidence of cracking or crazing of the body or other physical damage to the connector. After test, the contact resistance shall not exceed 70 mΩ. 
16	High Temperature Life (Except Cable Cover For Cable Connector)	When tested in accordance with Method 1005 of MIL-STD-1344, there shall be no evidence of cracking or crazing of the body or other physical damage to the connector. After test, the contact resistance shall not exceed 70mΩ. Temperature : +85℃ (Board to Board type) +70℃ (Board to Cable type) Test Time : 1000 hours
17	Corrosion (Salt Spray)	When tested in accordance with Method 101D of MIL-STD-202F, Test condition A, there shall be no any excessive corrosion on the every part of connector. After test, the contact resistance shall not exceed 70mΩ.
18	Resistance to SO_2 Gas	When tested in accordance with JEIDA-39(Issued by Japan Electronic Industry Development Association, as hydrogen sulphide environmental test method of connectors). Connectors are exposed in such environment with SO_2 gas of 10± 2ppm .There shall be no any excessive corrosion on the every part of connector. After test, the contact resistance shall not exceed 70mΩ. Test Time : 100 hours

No.	ITEM	SPECIFICATION
19	Solvent Resistance (Except Cable Cover For Cable Connector)	When tested in accordance with Method 215E of MIL-STD-202F, the connector shall be capable of being cleaned by ethyl alcohol. After test, there shall be no evidence of swelling, cracking, dissolving or any other defect.
20	Solderability (Except Cable Cover For Cable Connector)	When connectors are assembled to printed circuit boards the termination area of contact must fixed to p.c. board pad at a temperature of 245±5℃ for 10 seconds.
21	Solder Heat (Except Cable Cover For Cable Connector)	When connectors are assembled to printed circuit boards and processed through a reflow machine in such environment at a maximum temperature of 265±5℃ for 3~5 seconds. there shall be no damage to the connectors.
22	Connector Locking Force	When mated with mating connector with the case, and they are locked in place, the minimum retention force shall be no less than 83.3 N.
23	Contact Retention Force	When a force of 4.9 N minimum is applied to an individual contact in either direction along the axis of retention, there shall be no damage or loosening of the contact.