HONDA TSUSHIN KOGYO CO., LTD. TOKYO JAPAN	Sheet	1 of 4	
	Date	March 24, 2005	
PRODUCT SPECIFICATION 0.8mm SPACING HIGH DENSITY BOARD TO CABLE CONNECTOR RoHS compliant	Approved by	Checked by	Written by
	H. Ebihara	C. Nunokawa	Y. Kato

Connector part number

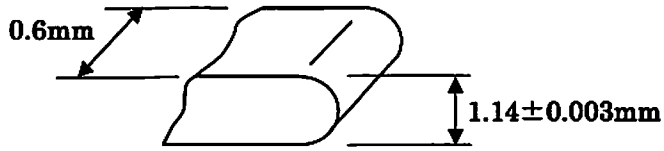
Connector type		Part No.	Note
Board to Cable	Female board Connector	HDRA-EA36LFDT( )-( )+	Right angle dip type board connector
	Male cable Connector	HDRA-E36MA+	IDC type cable connector Wire size available: #30AWG Insulation O.D: 0.5 to 0.6mm
	Applicable cable connector backshell	HDRA-E36LPT( )	Shielded over molded backshell with lock spring.

Characteristic

No.	Item	Specification
1	Current Rating	0.3 amp DC maximum per contact
2	Voltage Rating	30 volts AC (r.m.s.)
3	Operating Temperature	-40°C to 70°C
4	Storage Temperature	-40°C to 70°C
5	Humidity	95%RH maximum
6	Insulation Resistance	When tested in accordance with EIA 364-21, the insulation resistance shall be a minimum of 500 MΩ at 100volts DC.
7	Dielectric Withstanding Voltage	When tested in accordance with Method B of EIA364-20, there shall be no breakdown of insulation or flashover at 250 volts AC (r.m.s.) for a minute.
8	Contact Resistance	When tested in accordance with EIA364-23, contact resistance shall not exceed following values including the conductor resistance. Contact to contact: 70mΩ Cable connector shield to grounding plate: 500mΩ

<table>
<tr><th>No.</th><th>Item</th><th>Specification</th></tr>
<tr><td>9</td><td>Female Con Item tact Insertion
and Pulling Force
(Individual)</td><td>When tested in accordance with EIA364-13, female contact insertion force and puling force shall satisfy followings.

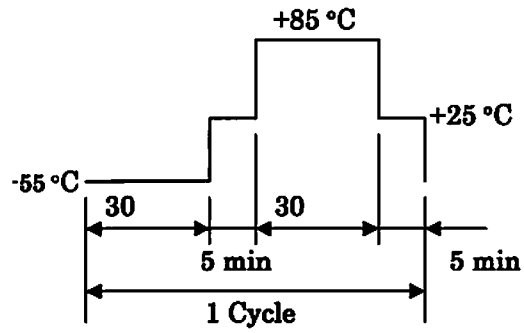
Insertion Force:
The force required to insert the test gauge into any contact shall not exceed 2.45 N per contact.

Pulling Force:
The force required to pull the test gauge 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 value shown in the table below.

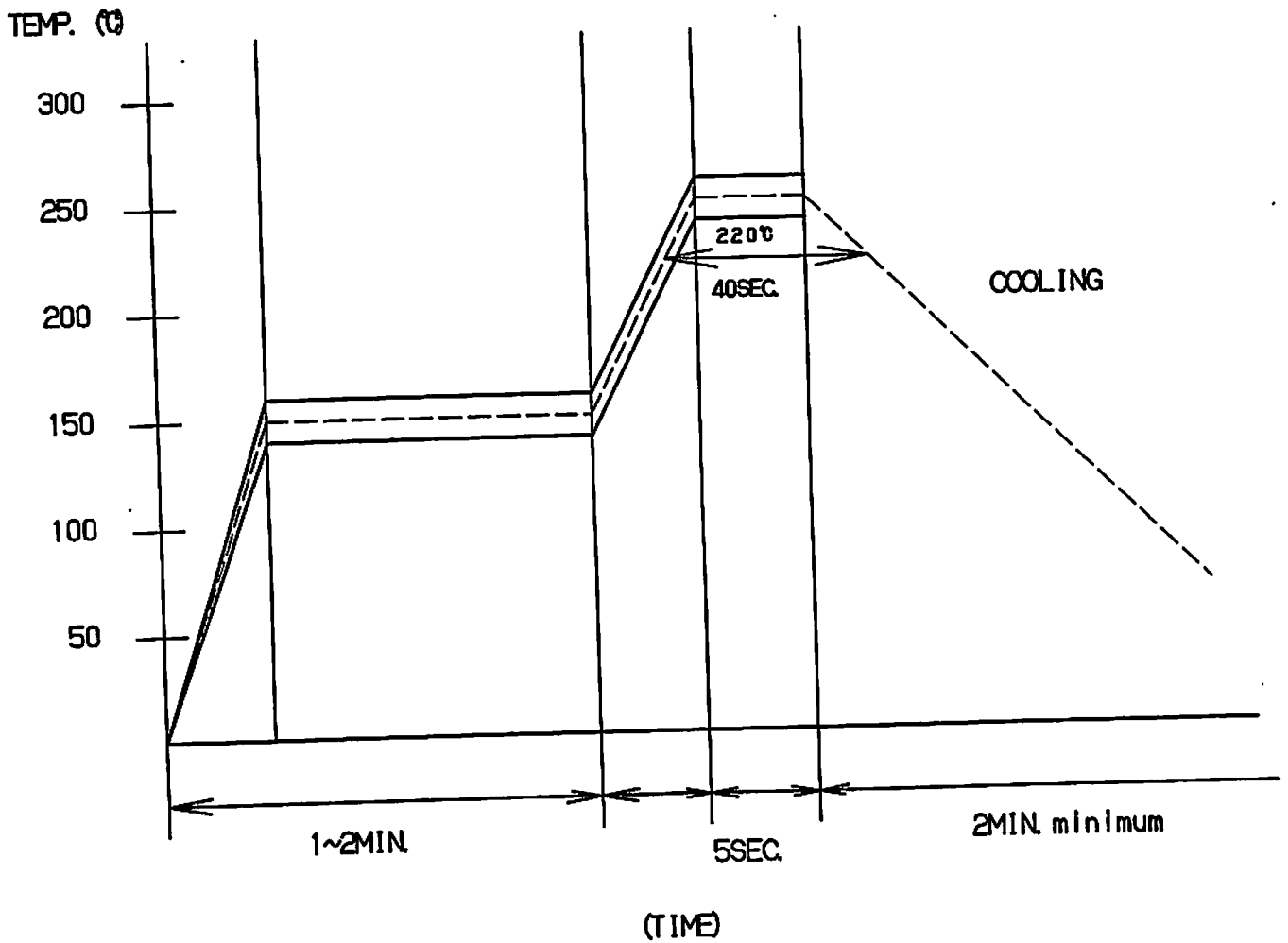
Withdrawal Force:
The force required to withdraw a connector from the mating one shall not be less than the value in the table below.
Unit: N
<table>
<tr><th>No. of pos.</th><th>Insertion Force</th><th>Withdrawal Force</th></tr>
<tr><td>36</td><td>31.36 max.</td><td>9.99 min.</td></tr>
</table></td></tr>
<tr><td>11</td><td>Durability</td><td>When subjected to 2000 cycles of insertion and withdrawal with mating connector at the rate of 500 cycles per hour, there shall be no evident damage
to the connector such as cracking. After the test, contact resistance shall satisfy values as stated in item #8.</td></tr>
<tr><td>12</td><td>Vibration</td><td>When tested in accordance with EIA364-28, there shall be no physical damage
to the connector. During vibration there shall be no discontinuity of the test circuit greater than 1 microsecond. (100 mA DC of current is applied to the circuit.)

Frequency range: 10Hz to 500Hz at 4.44G
Test direction: 3 axes (X,Y and Z)
Test time: 20 minuets for each axis</td></tr>
<tr><td>13</td><td>Physical Shock</td><td>When tested in accordance with EIA364-27, there shall be no physical 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 is applied to the circuit.)

Acceleration: 30G peak
Test direction: 3 axes (X,Y and Z)
Test cycles: 6 cycles for each axis (Total 18cycles)</td></tr>
<tr><td>14</td><td>Humidity Temperature Cycling
(Except cable connector backshell)</td><td>Connectors are tested in accordance with EIA364-31. After the test, insulation resistance shall be no less than 500 MΩ and there shall be no breakdown of
insulation or flashover at 250 volts AC (r.m.s.) for a minute.
Contact resistance shall satisfy values as stated in item #8.</td></tr>
</table>

No.	Item	Specification
15	Thermal Shock	When subjected to 25 cycles in the environment shown in below program, there shall be no evident physical damage to the connector. After the test, contact resistance shall satisfy values as stated in item #8. 
16	High Temperature Life (Except cable connector backshell)	When tested in accordance with EIA364-32, there shall be no evident physical damage to the connector. After the test, contact resistance shall satisfy values as stated in item #8. Temperature: +85 °C Test Time: 500 hours
17	Salt Spray	When tested in accordance with test condition A of EIA364-26, there shall be no any excessive corrosion on the every part of the connector. After the test, contact resistance shall satisfy values as stated in item #8. Concentration: 5% Temperature: 35°C Test Time: 20 hours
18	Resistance to Mix Flowing Gas	When tested in accordance with EIA364-65 environment class 3 of EIA364-65, there shall be no any excessive corrosion on the every part of the connector. After the test, contact resistance shall satisfy values as stated in item #8. Concentration: Cl_2 gas: 20±5ppb NO_2 gas: 200±50ppb H_2S gas: 100±20ppb Temperature: 30±2°C Test Time: 20 days

No.	Item	Specification
19	Solvent Resistance (Except cable connector backshell)	When tested in accordance with method 215E of MIL-STD-202F, the connector shall be capable of being cleaned by ethyl alcohol. After the test, there shall be no evidence of swelling, cracking, dissolving or any other defect.
20	Solderability	When board connector is assembled to printed circuit board, contact termination area must be soldered onto the pad at the temperature of 240±10°C for 15 seconds.
21	Solder Heat	When board connector is exposed in the environment at a maximum temperature of 265±5°C for 3 to 5 seconds, there shall be no damage to the connector.



PEAK TEMPERATURE 240±5℃, 220±5℃·40sec.