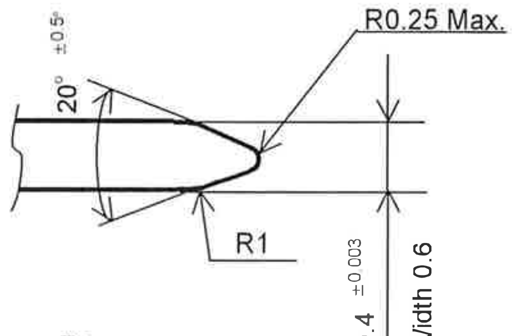
HONDA TSUSHIN KOGYO CO., LTD. TOKYO JAPAN	Date	Oct. 11 ,2005		
Product Specification 1.27mm Spacing PCS-E type connector		Approved by	Checked by	Written by
		(signature) S. Furusawa	(signature) T. Sato	(signature) T. Kawano

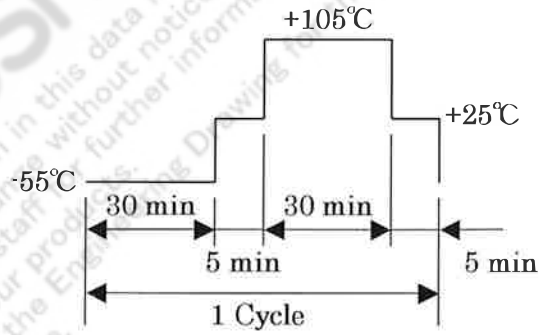
Connector part No.

Type	Part No.
Female connector	PCS-E()FS()+
Male connector	PCS-E()LMD+ PCS-E()MD+
Backshell	PCS-E()L() (Just to be used for latch retention force testing)

Specification

No.	Item	Specification
1	Current Rating	1 amp D.C. maximum per contact
2	Voltage Rating	250 volts A.C. (r.m.s.)
3	Operating Temperature	-55℃～+105℃
4	Storage Temperature	-55℃～+105℃
5	Humidity	85%Rh maximum
6	Insulation Resistance	When tested in accordance with method 302 of MIL-STD-202F, Test condition B, insulation resistance shall be a minimum of 100MΩ at 500volts D.C..
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 750 volts A.C. (r.m.s.) for a minute.
8	Contact Resistance	When tested in accordance with method 3002.1 of MIL-STD-1344, contact resistance shall not exceed 35mΩ without conductor resistance.
9	Female Contact Insertion and Pulling Force (Individual)	○ Insertion Force : The force required to insert test gauge into contact shall not exceed 1.5 N . ○ Pulling Force : The force required to pull test gauge from contact shall not be less than 0.3N .  Pin gauge

<table>
<tr><th>No.</th><th>Item</th><th>Specification</th></tr>
<tr><td>10</td><td>Connector Insertion and Withdrawal Force (Overall)</td><td>○ Insertion Force
The force required to insert mating male connector into the female one shall not exceed the value in the below table.

○ Withdrawal Force
The force required to withdraw mated male connector from the female one shall not be less than the value in the below table.
Unit : N
<table>
<tr><th>No. of pos.</th><th>Insertion Force</th><th>Withdrawal Force</th></tr>
<tr><td>20</td><td>25</td><td>9</td></tr>
<tr><td>28</td><td>35</td><td>13</td></tr>
<tr><td>36</td><td>45</td><td>14</td></tr>
<tr><td>50</td><td>60</td><td>24</td></tr>
<tr><td>68</td><td>85</td><td>33</td></tr>
<tr><td>80</td><td>98</td><td>39</td></tr>
<tr><td>96</td><td>118</td><td>47</td></tr>
</table></td></tr>
<tr><td>11</td><td>Humidity</td><td>When tested in accordance with method 103 of MIL-STD-202F, (Temperature: 40℃±2℃, Duration: 96hours), there shall be no physical damage to the connectors. After the test, the insulation resistance shall be no less than 100 MΩ and there shall be no breakdown of insulation or flashover at 750 volts A.C. (r.m.s.) for a minute. The contact resistance shall not exceed 35mΩ as well.</td></tr>
<tr><td>12</td><td>Thermal Shock</td><td>When tested in accordance with method 107 of MIL-STD-202F, (10 cycles in the environment shown in below program), there shall be no physical damage to the connectors. After the test, the contact resistance shall not exceed 35mΩ.
 
</td></tr>
<tr><td>13</td><td>Vibration</td><td>When tested in accordance with method 204 of MIL-STD-202F, Test condition A (Frequency: 10 Hz to 500Hz, Acceleration: 147 m/s² peak, Magnitude: 1.52 mm), there shall be no physical damage to the connectors. During the test, there shall be no electrical discontinuity of the test circuit greater than 1 microsecond.
(100 mA DC of current is applied to the circuit.)
After the test, the contact resistance shall not exceed 35 mΩ.</td></tr>
<tr><td>14</td><td>Physical Shock</td><td>When tested in accordance with method 213 of MIL-STD-202F, Test condition A (Semi-sine wave, Acceleration: 490 m/s², Standard holding time: 6 msec.), there shall be no physical damage to the connectors. During the test, there shall be no electrical discontinuity of the test circuit greater than 1 microsecond.
(100 mA DC of current is applied to the circuit.)
After the test, the contact resistance shall not exceed 35 mΩ.</td></tr>
</table>

No.	Item	Specification
15	Durability	When subjected to 500 cycles of insertion and withdrawal cycles with mating male connector at the rate of 600 cycles per hour, there shall be no evident physical damage to the connectors. After the test, the contact resistance shall not exceed 35 mΩ.
16	Salt Spray	When tested in accordance with method 101 of MIL-STD-202F, Test condition A, there shall be no any excessive corrosion on the every part of connectors. Concentration: 5% Temperature: 35°C Duration: 48hours After the test, the contact resistance shall not exceed 35mΩ.
17	Resistance to H_2S gas	When tested in accordance with JIS H 8502 10.2, there shall be no any excessive corrosion on the every part of connectors. Concentration: 3±1ppm Temperature: 40±1°C Duration: 48 hours After the test, the contact resistance shall not exceed 35mΩ.
18	Solvent Resistance	Connector shall be capable of being cleaned by alcohol or pure water. After the test, there shall be no evidence of swelling, cracking, dissolving or any other defects.
19	Solderability	When tested in accordance with method 1 of JIS C 5033, (Solder temperature: 245±5℃, Duration: 5 sec.), contact termination area should be at least 95% covered by continuous new solder coating.
20	Solder Heat	When tested in accordance with method 1 of JIS C 5034, Test condition A, to be placed onto PC Board, there shall be no damage to the connector. ○Flow soldering Solder temperature : 260℃±5℃ Duration : 10 seconds
21	Latch Retention Force	When mated female connector with a backshell which has latch mechanism is pulled from the female connector, latch retention force shall be no less than 98N.
22	High Temperature Life	When tested in accordance with method 108A of MIL-STD-202F, there shall be no physical damage to the connectors. After the test, the contact resistance shall not exceed 35mΩ. Temperature : +85℃ Duration: 1000 hours
23	Cold Resistance	When tested in accordance with JIS C 5201 7.9, there shall be no physical damage to the connectors. After the test, the contact resistance shall not exceed 35mΩ. Temperature : -55℃ Duration: 500 hours