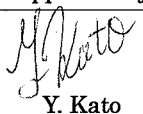
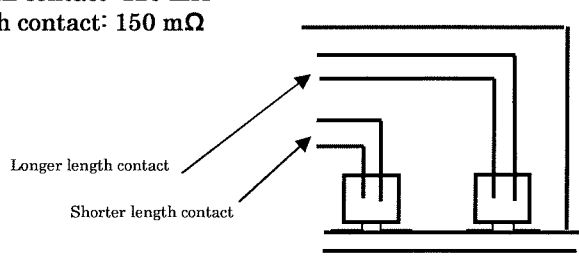
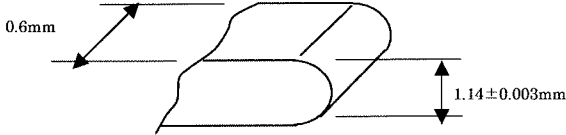
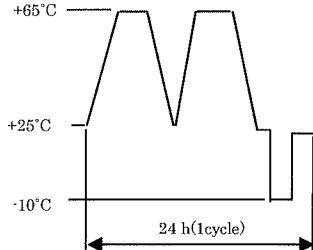
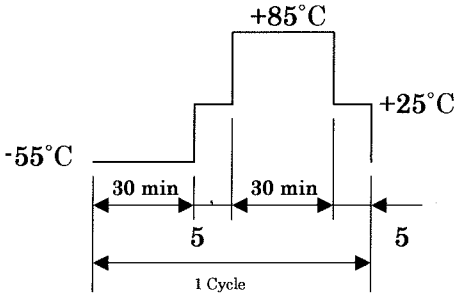


HONDA TSUSHIN KOGYO CO., LTD. Tokyo Japan		Sheet	1 of 4		
		Date	January 22, 2008		
Product Specification 0.8mm Spacing High Density 136 pos. SMT Connector <div style="border: 1px solid black; padding: 2px; display: inline-block;">RoHS compliant</div>		Approved by	Checked by	Written by	
		 Y. Kato		 S. Watanabe	
		Rev.No.	Date	By	Rev. description
		Δ1	JAN 13, 2015	K.Oaku	Changed part number
Connector part number					
Connector type		Part number	Note		
Dual stack right angle SMT connector (Two piece type)	Connector main body	Δ1 HDRA-ED136LFZG(-)(L)+	VHDCI 136 Pos. right angle SMT connector with locking post and hold-down		
	SMT board connector	HDRA-ED68FYG+			
Mating cable connector		HDRA-E68M()1+	IDC type cable connector Wire size available: #28 to #34 AWG Applicable insulation O.D: 0.5~0.6 mm		
Applicable cable connector backshell		HDRA-E68LGKPC	Shielded over molded backshell with thumb screws		
Characteristics					
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 100 volts DC.			
7	Dielectric Withstanding Voltage	When tested in accordance with Method B of EIA 364-20, 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 EIA 364-23, the contact resistance shall not exceed the values below including the conductor resistance. Shorter length contact: 120 mΩ Longer length contact: 150 mΩ 			

No.	Item	Specification
9	Female Contact Insertion and Pulling Force (Individual)	<p>When tested in accordance with EIA 364-13, female contact insertion force and pulling force shall satisfy followings.</p> <p>○Insertion Force The force required to insert the test gauge into any contact shall not exceed 1.47 N per contact.</p> <p>○Pulling Force The force required to pull the test gauge from any contact shall not be less than 0.294 N per contact.</p> 
10	Connector Insertion and Withdrawal Force (Overall)	<p>○Insertion Force The force required to insert a connector into the mating one shall not exceed 54.8 N.</p> <p>○Withdrawal Force The force required to withdraw a connector from the mating one shall not be less than 14.7 N.</p>
11	Durability	<p>When tested in accordance with EIA 364-09, there shall be no evidence damage to the connector such as cracking. After test, the contact resistance shall not exceed the values below.</p> <p>Shorter length contact resistance: 150 mΩ Longer length contact resistance: 180 mΩ</p>
12	Vibration	<p>When tested in accordance with EIA 364-28, 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.)</p> <p>Frequency range: 10 Hz to 500 Hz at 4.44 G Test direction: Three axes Test time: 20 minutes for each axis</p>
13	Physical Shock	<p>When tested in accordance with test condition H of EIA 364-27, 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.)</p> <p>Acceleration: 30 G peak Test direction: Three axes Test cycles: 6 cycles for each axis (Total 18 cycles)</p>
14	Humidity Temperature Cycling (Except Cable Connector Backshell)	<p>Connectors are tested in accordance with method 3, test condition B of EIA 364-31. After the test, the insulation resistance shall be no less than 500 MΩ, there shall be no breakdown of insulation or flashover at 250 volts AC (r.m.s.) for a minute and the contact resistance shall not exceed the value below.</p> <p>Shorter length contact resistance: 150 mΩ Longer length contact resistance: 180 mΩ</p> 

No.	Item	Specification
15	Thermal Shock (Except Cable Connector Backshell)	<p>When tested in accordance with test condition 1 of EIA 364-32, 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 the values below.</p> <p>Shorter length contact resistance: 150 mΩ Longer length contact resistance: 180 mΩ</p>  <p>The diagram illustrates a thermal shock test cycle. It starts with a 5-minute dwell at -55°C. This is followed by a 30-minute dwell at +85°C. Then, there is a 30-minute dwell at +25°C. Finally, there is a 5-minute dwell at +25°C. The entire sequence is labeled as '1 Cycle'.</p>
16	High Temperature Life (Except Cable Connector Backshell)	<p>When tested in accordance with test condition 3 of EIA364-32, 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 the values below.</p> <p>Shorter length contact resistance: 150 mΩ Longer length contact resistance: 180 mΩ</p> <p>Temperature: +85°C Test Time: 500 hours</p>
17	Salt Spray	<p>When tested in accordance with test condition A of EIA 364-26, there shall be no any excessive corrosion on the every part of connector. After test, the contact resistance shall not exceed the values below.</p> <p>Shorter length contact resistance: 150 mΩ Longer length contact resistance: 180 mΩ</p> <p>Salt spray concentration: 5 % Temperature: + 35°C Test time: 48 hours</p>
18	Mix flowing Gas	<p>When tested in accordance with environment class 3 of EIA 364-65, there shall be no any excessive corrosion on the every part of connector. After test, the contact resistance shall not exceed the values below.</p> <p>Shorter length contact resistance: 150 mΩ Longer length contact resistance: 180 mΩ</p> <p>Concentration: Cl₂ gas: 20 ± 5 ppb NO₂ gas: 200 ± 50ppb H₂ S gas: 100 ± 20ppb</p> <p>Temperature: 30 ± 2°C Relative humidity: 75 ± 2% Test Time: 20 days</p>

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 test, there shall be no evidence of swelling, cracking, dissolving or any other defect.
20	Solderability	When SMT board connectors are assembled to printed circuit board, contact termination area must be soldered to the pad in PC Board at a temperature of $245 \pm 5^{\circ}\text{C}$ for 10 seconds.
21	Solder Heat	When SMT board connectors are exposed in such environment at a maximum temperature of $265 \pm 5^{\circ}\text{C}$ for 3~5 seconds, there shall be no damage to the connectors.