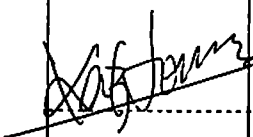
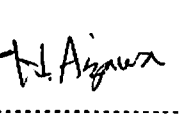
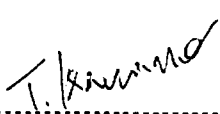
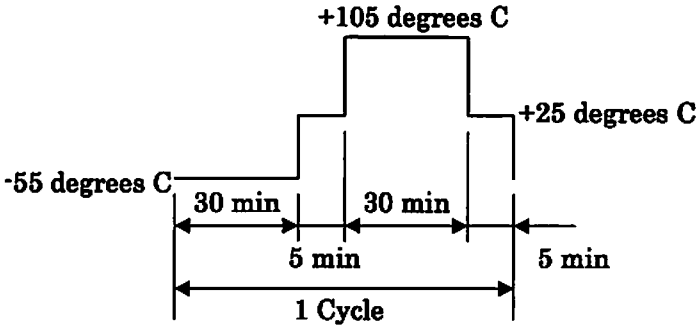


HONDA TSUSHIN KOGYO CO., LTD. TOKYO JAPAN		Date	Feb. 23, 2006	
Product Specification TAK series 4 Pos. connector for USB application 2008.6.23 T. Sato : Revised 2012.6.6 T. Kawano: Add. part No.		Approved by	Checked by	Written by
		 K. Homma	 H. Aizawa	 T. Kawano
Connector part No.				
Type	Part No.	Note.		
Cable plug connector	TAK-A4SFCG()-()-+	Crimping type connector with backshell		
Crimping contact	LPC-F103()	Cable crimping type contact (AWG #22 to #32)		
Board receptacle connector	TAK-A4LMDG()-()-+	Shielded Right angle dip type connector		
	TAK-A4MDG()-()-+	Shielded Straight dip type connector		
Specification				
No.	Item	Specification		
1	Current Rating	1 amp D.C. maximum per contact		
2	Voltage Rating	30 volts A.C. (r.m.s.)		
3	Operating Temperature	-40 to +105 degrees C		
4	Storage Temperature	-40 to +105 degrees C		
5	Humidity	85%Rh maximum		
6	Insulation Resistance	When tested in accordance with EIA 364-21, insulation resistance shall be a minimum of 1000 MΩ at 500 volts D.C..		
7	Dielectric Withstanding Voltage	When tested in accordance with Method B of EIA364-20, there shall be no breakdown of insulation or flashover at 500 volts A.C. (r.m.s.) for a minute.		
8	Contact Resistance	When tested in accordance with EIA364-23, contact resistance shall not exceed 50 mΩ without conductor resistance.		
9	Humidity (Steady temperature)	When tested in accordance with II of EIA364-31A test condition A, (Temperature: 40 degrees C , Duration: 168 hours), there shall be no physical damage to the connectors. After the test, the insulation resistance shall be no less than 1000 MΩ and there shall be no breakdown of insulation or flashover at 500 volts A.C. (r.m.s.) for a minute. The contact resistance shall not exceed 50 mΩ as well.		

No.	Item	Specification
10	Thermal Shock	<p>When tested in accordance with EIA364-32A test condition 1, (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 50 mΩ.</p> 
11	Vibration	<p>When tested in accordance with EIA364-28B test condition 5 test letter A, (Acceleration: 52.43 m/s² 1cycle: 15 minutes), 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 50 mΩ.</p>
12	Physical Shock	<p>When tested in accordance with EIA364-27B test condition H (Semi-sine wave, Acceleration: 294 m/s², Standard holding time: 11 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 50 mΩ.</p>
13	Durability	<p>When subjected to 50 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 50 mΩ.</p>
14	High Temperature Life	<p>When tested in accordance with EIA364-17 test condition 3 method A, there shall be no physical damage to the connectors. After the test, the contact resistance shall not exceed 50 mΩ.</p> <p style="text-align: center;">Temperature : +105 degrees C Duration: 250 hours</p>
15	Cold Resistance	<p>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 50 mΩ.</p> <p style="text-align: center;">Temperature : -55 degrees C Duration: 250 hours</p>
16	Latch Locking Force	<p>When cable plug with a backshell is pulled from board receptacle connector, latch locking force shall be no less than 70N.</p>

No.	Item	Specification
17	Cable retention force	When cable is pulled from cable plug connector, cable retention force shall be no less than 70 N.
18	Contact retention force	When contact is pulled from the connector, contact retention force shall be no less than 4.9 N.
19	Capacitance	When tested in accordance with EIA364-30 (Measurement frequency: 1 kHz), Capacitance shall not exceed 2 pF between adjacent contacts.