

HONDA TSUSHIN KOGYO CO.,LTD. TOKYO JAPAN	Sheet		1 of 4	
	Date issued		May 17,2005	
Product Specification HKP Series Connectors	Approved by	Checked by	Checked by	Prepared by
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	LTR.	DATE	BY	REV.DESCRIPT
				APP.

1.Connector Part Number

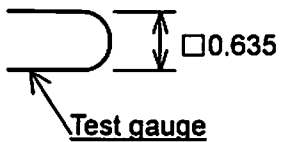
Type	Part Number	Note
Crimp contact (Strip form terminal)	HKP-F103(R)	Crimping tools Automatic crimping machine
	HKP-F403(R)	Machine body : HTK-100 Applicator : KP-201
Crimp contact (Loose piece terminal)	HKP-F113	Crimping tools
	HKP-F413	Manual crimping tool : KP-309
Mating connector	FFC Series male connectors	—
	HKP Series male connectors	—
Applicable insulator	HKP-()FS01	Single low type
	HKP-()F02	Double low type
Applicable wire	—	Core wire : AWG #24~#28 Insulation dia. range : 1.0~1.5mm

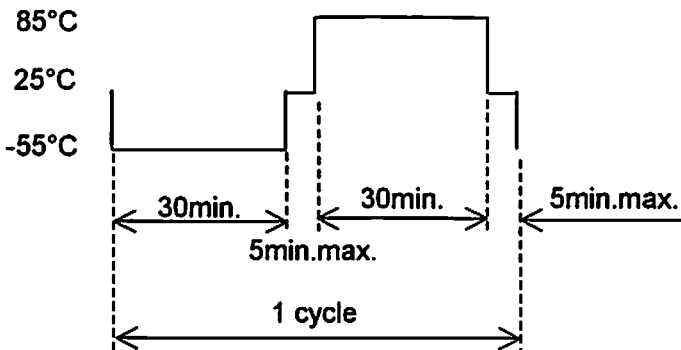
2.Connector configuration

Connector dimensions, material and plating shall be in accordance with the referenced drawings.

3. Connector Specification

No.	Item	Specification
1	Voltage rating	300V AC (r.m.s.)
2	Current rating	3A DC
3	Operating temperature	-40°C to +85°C
4	Humidity	90%RH max.

No.	Item	Specification
5	Dielectric withstanding voltage	1000V AC(r.m.s.)/1 min.
6	Insulation resistance	1000 MΩ or more at 500V DC.
7	Contact resistance	When tested in accordance with method 307 of MIL-STD-202E, the contact resistance shall not exceed 10 mΩ per contact.
8	Contact insertion and pulling force	<p>oInsertion Force The force required to insert the test gauge into any contact shall not exceed 2.94N per contact.</p> <p>oWithdrawal Force The force required to pull the test gauge from any contact shall not be less than 0.39N per contact.</p> 
9	Vibration	<p>When tested in accordance with MIL-STD-201A there shall not be physical or mechanical damage to the connector. During the test, there shall be no discontinuity of the test circuit greater than 1 microsecond.(100mA D.C. of current is applied to the circuit.)</p> <p>Frequency: 10 to 55Hz</p> <p>Direction : X,Y,Z axes</p>
10	Physical Shock	<p>When tested in accordance with MIL-STD-202F 213B, 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 : 490m/s²</p> <p>Direction : X,Y,Z axis each by 3 times</p>
11	Durability	When subjected to 100 cycles of insertion and withdrawal forces with mating connector at the rate of 600 cycles per hours. After test, the contact resistance shall not exceed 15 mΩ.

No.	Item	Specification
12	Thermal Shock	<p>When tested in accordance with method 107 condition A of MIL-STD-202F(as shown below). After the test, the contact resistance shall not exceed 15mΩ.</p> <p>Test method:</p>  <p>Temperature : -55°C to 85°C Number of cycles : 5 cycles</p>
13	Humidity, steady state	<p>When tested in accordance with method 103B of MIL-STD-202F. After the test, the insulation resistance shall be no less than 1000 MΩ, there shall be no breakdown of insulation or flashover at 1000 volts AC (r.m.s.) for a minute and the contact resistance shall not exceed 15mΩ.</p> <p>Humidity : 90% to 95 % Temperature : +40°C ± 2°C Test Time : 96 hours</p>
14	Salt Spray	<p>When tested in accordance with method 101E condition B of MIL-STD-202F, there shall be no any excessive corrosion on the every part of connector and the contact resistance shall not exceed 15mΩ.</p> <p>Concentration : 5% Temperature : 35°C Test time : 48 hours</p>
15	Hydrogen sulfide	<p>When tested in accordance with method 7.4.6 of PCMCIA/JEITA, there shall be no any excessive corrosion on the every part of connector and the contact resistance shall not exceed 15mΩ.</p> <p>Concentration : 3±1ppm Temperature : 40°C Test time : 96 hours</p>

No.	Item	Specification		
16	High Temperature Life	When tested in accordance with method 108A condition A of MIL-STD-202F. After the test, the contact resistance shall not exceed 15mΩ. Temperature : +85°C Test Time : 96 hours		
17	Contact Retention Force	Contact shall not be pulled out from Applicable insulator less than 29.4N.		
18	Wire retention force at the crimping part			
		Wire size	Wire retention force	Crimping height
		AWG#24	35.6N minimum	0.76~0.82 mm
		AWG#26	22.2N minimum	0.74~0.80 mm
		AWG#28	13.3N minimum	0.71~0.77mm