							Sheet 1 of 3
HONDA TSUSHIN KOGYO CO., LTD. TOKYO JAPAN Date					Jan. 31, 2014		
				App	roved by	Checked by	Written by
Product Specification  TAK series 4 Pos. connector					Bon	12 hasuns	1. Koncell
					Homma	K. Hasumi	T. Kawano
Conr	nector part No.						
	Type	Part No.			Note.		
Cable plug connector		TAK-	TAK-V4SFCG()-()()-		Crimping type connector with backshell		
Crimping contact		TAK-FG()+			Cable crimping type contact (AWG #24 to #28)		
Boa	ard receptacle connect	or TAK-	r TAK-V4LMDG()-()F+		Shielded Right angle dip type connector		
Spec	<u>ification</u>						
No.	Item			$\mathbf{S}_{\mathbf{I}}$	pecification	n	
1	Current Rating	2.5 amp D.C.	2.5 amp D.C. maximum per contact (AWG#24)				
2	Voltage Rating	30 volts A.C. (r.m.s.)					
3	Operating Temperature	-40 to +105 d	-40 to +105 degrees C				
4	Storage Temperature	-40 to +105 degrees C					
5	Humidity	85%Rh maxin					
6	Insulation Resistance	When tested in accordance with EIA 364-21, insulation resistance shall be a minimum of 1000 M 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 m $\Omega$ 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 M $\Omega$ 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 m $\Omega$ as well.					

		Sheet 2 of 3				
No.	Item	Specification				
10	Thermal Shock	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 m $\Omega$ .				
		+105 degrees C				
		-55 degrees C 30 min 30 min				
		5 min  1 Cycle				
11	Vibration	When tested in accordance with EIA364-28B test condition 5 test letter A,(Acceleration: $52.43 \text{ m/s}^2$ 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 $50 \text{ m}\Omega$ .				
12	Physical Shock	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 m $\Omega$ .				
13	Durability	When subjected to 30 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 m $\Omega$ .				
14	High Temperature Life	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 m $\Omega$ .  Temperature: +105 degrees C Duration: 250 hours				
15	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 50 m $\Omega$ .  Temperature: -55 degrees C Duration: 250 hours				
16	Latch Locking Force	When cable plug with a backshell is pulled from board receptacle connector, latch locking force shall be no less than 70N.				

## Sheet 3 of 3

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