

0.50/1.5 HYBRID SERIES UNSEALED CONNECTORS (SMT Type)

1. SCOPE:

1.1. Contents

This specification covers the requirements for product performance, test methods and quality assurance provisions of 0.50/1.5 Hybrid series unsealed Connectors (SMT-Type.). Applicable product description and part numbers are as shown in Appendix 1. However, the performance of 1.5 Receptacle Contacts refers to the specification of each Receptacle benders.

2. APPLICABLE DOCUMENTS:

The following documents form a part of this specification to the extent specified herein. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

- 2.1. TE Specifications:
 - A. 109-5000 Test Specification, General Requirements for Test Methods
 - B. 114-5379-1 Application Specification : Crimping of 0.50 Receptacle Contact
 - C. 501-5918 Qualification Test Report
- 2.2. Commercial Standards and Specifications:
 - A. JASO D605 Multi-pole Connector for Automobiles
 - B. JASO D7101 Test Methods for Plastic Molded Parts
 - C. JIS C3406 Low Voltage Wires and Cables for Automobiles
 - D. JIS D0203 Method of Moisture, Rain and Spray Test for Automobile Parts
 - E. JIS D0204 Method of High and Low Temperature Test for Automobile Parts
 - F. JIS D1601 Vibration Testing Method for Automobile Parts
 - G. JIS R5210 Portland Cement
 - H. MIL-STD-202 Testing Method 208: Method of Soldering



3. **REQUIREMENTS**:

3.1. Design and Construction:

Product shall be of the design, construction and physical dimensions specified on the applicable product drawing.

3.2. Materials:

A. Contact :

Description	Material	Finish
Tab(Male)	Brass	Part of Post-Tinned(nickel under plating)
Receptacle(Female)	Copper Alloy	Pre-Tinned

Fig.1

B. Peg:

Description	Material	Finish
Peg	Brass	Post-Tinned(nickel under plating)
		Fig.2

C. Housing: LCP resin

D. Wire: The used wire is according to the following table

Tab	Wire used
0.50	0.35mm ² (Applicable wire refer to 114-5379)
1.5	0.3~2.0 mm ² (reference to the operation manual of the maker)

3.3. Ratings:

Fig.3

- A. Voltage Rating: 12 V DC
- B. Temperature Rating: -30°C~85°C

3.4. Performance Requirements and Test Descriptions:

The product shall be designed to meet the electrical, mechanical and environmental performance requirements specified in Fig.4 and Fig5. All tests shall be performed in the room temperature, unless otherwise specified.

The samples used in test are implemented by the lead free solder paste with 0.15mm thick metal mask.



3.5. Test Requirements and Procedures Summary:

Para	Test Items	cedures					
3.5.1	Confirmation of Product		requiremen	uirements nts of product drawing tion 114-5379	Visually ,dimensionally		
		Electric	al Require	ements (0.50 Ter	rminals Only)		
	Termination		Initial	10 mΩ Max.	Subject mated contacts assembled in		
3.5.2	Resistance (Low Level)	0.50	Final	20 mΩ Max.	housing to 20 mV Ma mA.Fig. 6 TE Spec	ax. Closed circuit at 10 . 109-5311-1	
3.5.3	Termination Resistance	0.50	Initial	10 mV/A Max.	Subject mated conta	cts assembled in Closed circuit at 1A.	
5.5.5	(Specified Current)	0.50	Final	20 mV/A Max.	Fig. 6 TE Spec. 10		
3.5.4	Dielectric Withstanding Voltage	No cre shall o		charge or flashover	Impressed voltage 5 Mated connector. Fig.7 TE Spec. 109		
3.5.5	Insulation Resistance		1Ω Min. (Ir 1Ω Min. (F		Impressed voltage 5 Mated connector. Fig. 7 TE Spec. 109	9-5302	
3.5.6	Current Leakage	3mA I	Max.		Impressed voltage 1 Fig. 8 TE Spec. 109		
3.5.7	Temperature Rise	0.50	60°C Ma	х.	Measure temperature rising at wire crimped by applied current to all positions. Fig. 12 TE Spec. 109-5310		
3.5.8	Over Current Loading	0.50	No ignition the test.	on is allowed during	Apply the current to Applied Current : Fig	only one position.	
		Phys	ical Requi	rements (0.5 Term	inals Only)		
					Test connector on F Mount: Fig. 10	Р. С. В	
3.5.9	Vibration		ectrical di 1µsec. sha	scontinuity greater all occur.	Vibration Frequency(Hz)	20→200→20	
3.5.9	(High Frequency)			ments of test item	Sweep time(min)	3	
		on the	e "3.6 seq	uence".	Acceleration(m / s ²)		
					Vibration Direction	X, Y, Z	
					Duration	3hours each	
					Test connector on F		
					Mount: method at F Acceleration(m/s ²)	980	
					Duration(msec)	6	
		No ol	octrical di	scontinuity greater	Waveform	Half sine wave	
3.5.10	Shock		1µ sec. sh			3 drops each	
		undir	η ουο. οι		Direction and number of Drops	directions of X,-X, Y,- Y,Z and -Z axes,	
					TE Spec.	totally 18 drops 109-5208	
					Operation Speed : 1		
2544	Connector Mating	0 50	70114-	~	Measure the force re		
3.5.11	Force	0.50	70N Ma	x	connectors.		
					TE Spec. 109-5206		
3.5.12	Connector Unmating Force	0.50	70N Ma	x	Operation Speed : Measure the force r connectors. (withou TE Spec. 109-5206	equired to unmate thousing lock)	

Fig.4 (To be continued)



3.5.13 St 3.5.14 Te Fc 3.5.15 Fc (a 3.5.16 Ci	Connector Locking Strength Ferminal Insertion Force into Plug housing Ferminal Retention Force at final locked position) Crimp tensile strength Retention Force of Post	100N 0.50 0.50 Wird size (mm 0.35	Min. 10N (p 40N e e a ²)		al)	Terminals Only) Apply an axial pull-off housing, measure loc Operation Speed: 100 TE Spec. 109-5210 Measured insertion for housing. TE Spec. 109-5211 Measure contact reter lock set it effect. Op TE Spec. 109-5212	king strength. Omm/min. rce of terminal fitting ntion force with se eration Speed: 10	g into
3.5.13 St 3.5.14 Te Fc 3.5.15 Fc (a 3.5.16 Cr	Strength Ferminal Insertion Force into Plug housing Ferminal Retention Force at final locked position) Crimp tensile strength	0.50 0.50 Wird size (mm 0.35	10N (p 40N e e p ²)	V Max. er 1 termina V Min. Tensile st		housing, measure loc Operation Speed: 100 TE Spec. 109-5210 Measured insertion for housing. TE Spec. 109-5211 Measure contact reter lock set it effect. Op TE Spec. 109-5212	king strength. Omm/min. rce of terminal fitting ntion force with se eration Speed: 10	g into
3.5.14 Fc 3.5.15 Fc (a 3.5.16 Cr	Force into Plug housing Ferminal Retention Force at final locked position) Crimp tensile strength	0.50 Wird size (mm 0.3	(p 40N e e 1 ²)	er 1 termina N Min. Tensile st		housing. TE Spec. 109-5211 Measure contact reter lock set it effect. Op TE Spec. 109-5212	ntion force with se eration Speed: 10	condary
3.5.15 Fc (a 3.5.16 Cr	Force at final locked position) Crimp tensile strength	Wire size (mm 0.3	e e 1 ²)	Tensile st	rength(N)	Measure contact reter lock set it effect. Op TE Spec. 109-5212	eration Speed: 10	
		size (mm 0.3	e 1 ²)		rength(N)	Apply on axial pull off		
		(mm 0.3	1 ²)	Initial			load to crimped w	vire of
3.5.17 Re	Retention Force of Post		5		Final	contact secured on th Release the insulation	n barrel.	
3.5.17 R	Retention Force of Post	T		50 MIN.	40 MIN.	Operation speed: 100 TE spec. 109-5205 C		
3.5.17 N		Termi	inal	0.50	20N Min.	Push tab contact from	n P. C. Board side	
۱ <u> </u>		size 1.5 20N Min.			20N Min.	mating side, measure the contact retention force. Operation speed: 100mm/min.		
3.5.18 Re	Resistance to "Kojiri"			quirements ie "3.6 sequ		Repeated mating-unn and right-left direction TE Specification, 109	is for 10 cycles.	ıp-down
						Test condition is acco	ording to the follow	ing table
				er Coverage		Solder Sn-3Ag-0.5Cu		
3.5.19 So	Solder ability			e) : 95 % M	lin.	Solder temperature(°C)	250±5	
		(with เ	unde	er plating)		Immersion duration(s)	5±0.5	
						Flux	ULF-300R	
						Test connector on P. Temperature should b Temperature at PCB	be measured at co	ntact.
						Solder	Sn-3Ag-0.5Cu Sol	der Paste
S S	Solder ability	Fillet s	shall	be formed	around all	Metal mask(mm)	0.15 Min.	
	Reflow Soldering)	contac				Pre-Heat	Temperature(°C)	170~190
							Time(s) Temperature(°C)	110 Min. 200
						soldering	Times(s)	200 70 Min.
						Peak temperature(°C)	245 Min.	
						Test connector on P.	С. В.	
		_				Temperature should to Temperature at PCB		ntact.
	Posistance to Defleve			using shall		Solder	Sn-3Ag-0.5Cu Solo	der Paste
2521	Resistance to Reflow Soldering Heat			of deformati		Dro Hoot	Temperature(°C)	170~190
	Joidening Heat			amage.		Pre-Heat	Time(s)	110 Min.
		2.1901				soldering	Temperature(°C)	200 70 Min
						Peak temperature(°C)	Times(s) 245 Min.	70 Min.

Fig.4 (To be continued)



Para.	Test Items	Requirements	Procedures					
		Physical Requirements (0.50	Ferminals Only)					
			Test connector on P. C. B. Temperature should be measured at contact. Temperature at PCB :260°CMax.					
		Tested housing shall no	Solder	Sn-3Ag-0.5Cu Sol	der Paste			
3.5.21	Resistance to Reflow	evidence of deformation or		Temperature(°C)	170~190			
	Soldering Heat	fusion of housing and no physical damage.	Pre-Heat	Time(s)	110 Min.			
		physical damage.	addariag	Temperature(°C)	200			
			soldering	Times(s)	70 Min.			
			Peak temperature(°C)	245 Min.				
3.5.22	Handling Ergonomics	No abnormalities allowed in manual mating/unmating handling.	Manually operated.					
		Environmental Requirements (0.50	Terminals Only)					
3.5.23	Thermal Shock	Satisfy requirements of test item	[1], [2] in the followin Repeat 1000 cycles. Monitor resistance-va current of 10mA durir	riation at closed c				
	on the "3.6 sequence".		[1]	[2]				
		Time(hr)	0.5	0.5				
			Temperature	80±3	-40±3			
			TE Spec.	109-5103				
	E	Environmental Requirements (0.50						
3.5.24	Humidity (Steady State)	Satisfy requirements of test item on the "3.6 sequence". Current Leakage: 3mA Max.	Test condition is show Monitor current leaka Time(Hr) Temperature(°C) Humidity(%RH) TE Spec.	•				
3.5.25	Industrial Gas (SO ₂)	Satisfy requirements of test item on the "3.6 sequence".	Using unmated connected Value the performance test Gas Type Gas density(ppm) Gas temperature(°C) Gas humidity(%RH) Test period(Hr) TE Spec.					
3.5.26	Temperature Life (Heat Aging)	Satisfy requirements of test item on the "3.6 sequence".	120°C±3°C, 120hours TE Spec. 109-5104					
3.5.27	Resistance to Cold	Satisfy requirements of test item on the "3.6 sequence".	-40°C±3°C, 120hours TE Spec. 109-5108					
3.5.28	Humidity-Temperature Cycling	Satisfy requirements of test item on the "3.6 sequence".	Condition : Fig. 11 Making this condition a cycle, repeated 10 cycles. Monitor fluctuation of electrical resistance at 10mA current loaded during the test.					

Fig.4 (To be continued)



Para.	Test Items	Requirements	Pr	ocedures				
3.5.26	Temperature Life	Satisfy requirements of test item	120°C±3°C, 120hours					
5.5.20	(Heat Aging)	on the "3.6 sequence".	TE Spec. 109-5104					
3.5.27	Resistance to Cold	Satisfy requirements of test item $-40^{\circ}C \pm 3^{\circ}C$, 120hours						
0.0.27		on the "3.6 sequence".	TE Spec. 109-5108					
3.5.28	Humidity-Temperature Cycling	Satisfy requirements of test item on the "3.6 sequence".	Condition : Fig. 11 Making this condition a Monitor fluctuation of ele current loaded during th	ectrical resistan				
3.5.29	Dust Bombardment	Satisfy requirements of test item on the "3.6 sequence".	Subject JIS R 5210 ce seconds in 15 minutes mating/unmating per 2 TE Spec. 109-5110	s intervals for 8				
3.5.30	Compound Environment Resistance	Satisfy requirements of test item on the "3.6 sequence". No electrical discontinuity greater than 1 μ sec. shall occur.	Test condition is shown in Monitor resistance-variat instant cutoff occurs for a Temperature(°C) Vibration Frequency(Hz) Sweep time(min) Acceleration(m/s ²) Vibration Direction Duration(Hr) Test Current Method of fixation	ion, and after thi	s test check if vibration".			
3.5.31	Condensation	Satisfy requirements of test item on the "3.6 sequence".	[1],[2] in the following 48 cycles. move [1] to Monitor current leakag Time(Hr) Temperature(°C) Humidity(%RH) Current loaded	table as one cy [2] directly				

Fig. 4 (End)



3.6. Product Qualification Test Sequence

No. Test Examination 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 3.5.1 Examination of Product 1.3 1.3 1.5 1.6 1.4 1.5 1.5 1.6 1.4 1.5 1.5 1.6 1.4 1.5 1.5 1.6 1.4 1.5 1.5 1.5 1.5 1.7 1.5 1.7 1.5 3.5.2 Termination Resistance 6 - 2.6 2.6 2.7 2.5 5.11 .						•				Te	st Grou	ID						
Test Sequence* 3.5.1 Examination of Product 1.3 1.3 1.5 1.6 1.4 1.5 1.5 1.6 <th< td=""><td>No</td><td>Test Exemination</td><td>1</td><td>2</td><td>2</td><td>4</td><td>5</td><td>6</td><td>7</td><td></td><td>1</td><td>· ·</td><td>11</td><td>10</td><td>12</td><td>11</td><td>15</td><td>16</td></th<>	No	Test Exemination	1	2	2	4	5	6	7		1	· ·	11	10	12	11	15	16
3.5.1 Examination of Product 1.3 1.3 1.3 1.5 1.6 1.4 1.5 1.5 1.6 1.3 1.7 1.5 1.6 1.4 1.5 1.6 1.6 1.7 1.5 1.7 1.5 1.6 1.6 1.6 1.6 1.6 1.7 1.5 1.6 1.6 1.7 1.5 1.7 1.5 1.7 1.5 1.7 1.5 1.6 <th< td=""><td>INO.</td><td>rest Examination</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>0</td><td>1</td><td></td><td></td><td></td><td></td><td>12</td><td>13</td><td>14</td><td>15</td><td>10</td></th<>	INO.	rest Examination	1	2	3	4	5	0	1					12	13	14	15	10
3.5.2 Termination Resistance (Low Level) 6 - 2.6 2.7 - 2.6 2.6 2.7 - 2.8 2.6 2.8 2.6 2.7 - 2.8 2.6 2.7 - 2.8 2.6 2.8 2.6 2.7 - 2.8 2.6 2.7 - 2.8 2.6 2.7 - 2.8 2.6 2.7 - 2.8 2.6 2.7 - 2.8 2.6 2.7 - 2.8 2.6 2.7 - 2.8 2.6 2.8 2.6 2.7 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 3.7 <	251	Eventing tion of Draduct	4.0	4.0	4.0	4.5	1.0		4.5				1.0	4.0	4 7	4.5	4 7	4.5
3.5.2 (Low Level) 6 - 2.6 2.7 - 2.8 2.6 2.8 - 2.8 2.6 2.8 - 2.8 2.6 2.8 - 2.8 2.6 2.8 - 2.8 2.6 2.8 - 3.5 Termination Resistance 7 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.9 3.7 3.9 - - - 5.12 - - 6.11 - - 2.6 3.5.1 Emperature Rising 0 -	-			1,3	1,3			1,4						1,3				1,5
3.5.3 (Rated Current) 7 - 3.7 3.8 - 3.7 3.7 3.7 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.8 - 3.7 3.7 3.8 - 3.7 3.7 3.8 - 3.7 3.7 3.8 - 3.7	3.5.2		6	-	-	2,6	2,7	-	2,6	2,6	2,9	2,6	2,7	-	2,8	2,6	2,8	-
3.5.4 Voltage 9 - - - - 5,12 - - 5,11 -	3.5.3		7	-	-	3,7	3,8	-	3,7	3,7	3,10	3,7	3,8	-	3,9	3,7	3,9	-
33.5.6 Current Leakage - - - - - 7 - - - - 4 3.5.7 Temperature Rising 10 -	3.5.4	0	9	-	-	-	-	-	-	-	5,12	-	-	-	5,11	-	-	-
3.5.7 Temperature Rising 10 - - - - - - 4.9 - - 5.7 - - 5.7 - - 5 - - - - - 5 - - - - - 5 - <t< td=""><td>3.5.5</td><td>Insulation Resistance</td><td>8</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>4,11</td><td>-</td><td>-</td><td>-</td><td>4,10</td><td>-</td><td>-</td><td>2,6</td></t<>	3.5.5	Insulation Resistance	8	-	-	-	-	-	-	-	4,11	-	-	-	4,10	-	-	2,6
3.5.8 Over Current Loading - - 4 - </td <td>3.5.6</td> <td>Current Leakage</td> <td>I</td> <td>-</td> <td>I</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>1</td> <td>7</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>4</td>	3.5.6	Current Leakage	I	-	I	-	-	-	-	1	7	-	-	-	-	-	-	4
3.5.9 Vibration (High Frequency) - - 5 - <	3.5.7	Temperature Rising	10	-	I	-	-	-	-	1	-	-	4,9	-	-	-	5	-
3.5.9 (High Frequency) - - - 5 -	3.5.8	Over Current Loading	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-
35.11 Connector Mating Force 5 .	3.5.9		-	-	-	-	5	-	-	-	-	-	-	-	-	-	6	-
33.11 Force 5 -	3.5.10	Physical Shock	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
35.12 Force 11 -	3.5.11	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33.13 Strength - - - - 9 13 - 11 - 13 - - - - 9 13 - 11 - 13 - 11 - 13 - - - - - - - 11 - 12 5 14 - - - - 111<	3.5.12	U	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35.15 Contact Retention Force 12 - - - - 10 14 - 12 5 14 - - - - 10 14 - 12 5 14 - - - - - - 11 - 8 13 - - - - - - 11 - 8 13 - <td>3.5.13</td> <td>-</td> <td>-</td> <td>-</td> <td>4</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>9</td> <td>13</td> <td>-</td> <td>11</td> <td>-</td> <td>13</td> <td>-</td> <td>-</td> <td>-</td>	3.5.13	-	-	-	4	-	-	-	-	9	13	-	11	-	13	-	-	-
35.15 Force 12 - - - - 10 14 - 12 5 14 - - - - - 10 14 - 12 5 14 - - - - - - 11 - 8 13 - - - - - - 11 - 8 13 - <td>3.5.14</td> <td>Contact Insertion Force</td> <td>4</td> <td>-</td>	3.5.14	Contact Insertion Force	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35.16 Crimp Tensile Strength 13 - - - - 11 - 8 13 - - - - - - 11 - 8 13 - - - - - - - - 11 - 8 13 -	3.5.15		12	-	-	-	-	-	-	10	14	-	12	5	14	-	-	-
35.17 Tab Retention Force 14 - - - - - - 14 - - - - - - - - 14 -	3.5.16		13	-	-	-	-	-	-	11	-	8	13	-	-	-	-	-
35.19 Solderability - 2 -			14	-	-	-	-	-	-	-	-	-	14	-	-	-	-	-
35.20 Solderability (Reflow) 2 -	3.5.18	Resistance to "Kojiri"	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-
3.5.21 Resistance to Solder Heat - 2 - <	3.5.19	Solderability	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5.21 Heat - 2 -	3.5.20	Solderability (Reflow)	2	-	I	-	-	-	-	1	-	-	-	-	-	-	-	-
3.5.23 Thermal Shock - - - - 4 -	3.5.21		-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.5.24 Humidity(Steady State) - - - - - 6 -	3.5.22		-	-	-	-	-	-	-	8	-	-	10	4	12	-	-	-
3.5.25 Industrial SO ₂ Gas -<			-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
3.5.26 Temperature Life (Heat Aging) - - - 4 2 - - - 5 -			-	-	-	-	-	-	-	-	6	-	-	-	-	-	-	-
3.5.26 (Heat Aging) - - - 4 2 - - 5 -	3.5.25	—	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-
3.5.28 Humidity-Temperature Cycling - - - - - - - - 6 - - - 3.5.29 Dust Bombardment -	3.5.26	-	-	-	-	-	4	2	-	-	-	-	5	-	-	-	-	-
3.5.28 Cycling - <t< td=""><td>3.5.27</td><td>Resistance to Cold</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>2</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	3.5.27	Resistance to Cold	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
3.5.29 Dust Bombardment - - - - - - - 4 - - 3.5.30 Compound Environment Resistance - - - - - - - 4 - -	3.5.28		-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-
3.5.30 Resistance 4 -	3.5.29	, ,	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-
		Compound Environment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
	3.5.31		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3

Fig.5 (a) Numbers indicate sequence in which tests are performed.







Wrap metallic foil to cover the connector surface





Fig.7



Wire Size (mm ²)	Test Pattern	Test Current (A)	Duration
	1	11.0	60 min.
0.05	2	13.5	10 sec.
0.35	3	15.0	5 sec.
	4	20.0	1 sec.





Fig. 10







	Wire size	Cap Ho	usina	Test cu	irrent (A)	Temperature rise
Contact	(mm ²)	(Left: Pos Rig		Single Pos	All Pos	(⊿t)
0.50	0.35	12		5	2.5	60°C MAX

Fig.12

Contact	Finish	Wire size (mm ²)	Cap housing (Pos)	Test current(A)	Test time
0.50	Part of Post- Tinned	0.35	12	2.5	45 min ON、15 min OFF for one cycle 300 cycles

Fig.13

No.	Product Part No.*	Description						
∘Cap .	○Cap Assembly (male connector)							
1	1939082	0.50/1.5 series 16Pos Cap Assembly SMT H-Type						
oPlug	Assembly (female co	onnector) ··· Stacking Type**						
2	1903607	0.50/1.5 series 1.5 4Pos Lock Housing						
3	1903611	0.50/1.5 Series 0.50 12Pos Plug Assembly(Lower Layer)						
Receptacle Contact (female contact)								
18278550.50 ReceptacleContact (S) (M)(Post-Tinned)								
1.5 Receptacle Contact (Post-Tinned)								

Appendix.1

*Note : Part number is consisted from listed base number and 1 digit numeric prefix and

suffix with dash. Refer to catalog or customer drawing for specific part numbers

for each base number. When prefix is zero, zero and dash are omitted.

**Note : The construction of Cap Assembly and Plug Assembly is according to Appendix.2

Cap Assembly (male connector)	Plug Assembly (female connector)
0.50/1.5 Ser. 16Pos.	4 + 12 (16Pos)

Appendix.2

Note : The No. in Appendix.2 is consistent with Appendix.1.