



PRODUCT SPECIFICATION



1. SCOPE(적용범위)

This Product Specification covers the 2.0 mm pitch Center Board-In Connector series
(이 Spec.은 2.0mm pitch Center Board-In Connector에 대하여 규정한다)

2. PRODUCT DESCRIPTION(제품구성)

2.1 PRODUCT NAME AND SERIES NUMBER(제품명 & 제품번호)

Product Name	Parts Number
Housing	35023-0**
Terminal(ST)	35044-9***
Terminal(R/A)	35021-1***

2.2 DIMENSIONS, MATERIALS, PLATINGS AND MARKINGS(치수,재질,도금)

Refer to the attached product Drawings (제품도 참조)

3. RATINGS(정격)

3.1 VOLTAGE(전압)

125 Volts AC (RMS) {or 125 Volts DC}

3.2 CURRENT AND APPLICABLE WIRES(허용전류 및 적용 WIRES)

AWG	Amps	Outside Insulation Diameter
#24	2.5A	φ 1.5 mm MAX.
#26	1.5A	
#28	1.0A	

3.3 TEMPERATURE(사용온도)

Operating: - 40°C to + 105°C

4. PERFORMANCE(성능)

4.1 ELECTRICAL REQUIREMENTS(전기적 특성)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	접촉저항	Wire와 압착된 Terminal을 개방전압 20mV이하, 단락전류 10mA에서 측정한다	5 milliohms MAXIMUM
	Contact Resistance	Crimp the applicable wire on to the terminal, measure by dry circuit, 20mV MAX. 10mA	
2	절연저항	결합된 Connector를 인접 Ter' 사이 및 Ter' 과 GND간에 DC500V를 인가하여 측정한다.(MIL-STD-202 시험법302 조건B)	1,000 MΩ MIN.
	Insulation Resistance	Mate applicable cable & apply 500 V DC between adjacent terminal or ground.(MIL-STD-202 Method 302 COND.B)	
3	내전압	결합된 Connector를 인접 Ter' 사이 및 Ter' 과 GND간에 AC1000V를 1분간 가한다.(MIL-STD-202 시험법 301)	이상없을것 (No breakdown)
	Dielectric Withstanding Voltage	Mate Connectors, apply 1000V AC(rms) for 1 minute between adjacent terminals or ground.(MIL-STD-202 Method 301)	

REVISION: G	ECR/ECN INFORMATION: EC No: KOR2005-0026 DATE: 2004/09/30	TITLE: 2.0mm Ptich Center Board-In Conn. (35021/35023/35044) -LEAD FREE-	SHEET No. 1 of 3
DOCUMENT NUMBER: PS-35044-001	CREATED / REVISED BY: DYJANG	CHECKED BY: Y.SIK.KIM	APPROVED BY: CWLEE



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4.2 MECHANICAL REQUIREMENTS (기계적 특성)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT	
1	삽입력 및 발거력	PCB Hole에 매분 25 ± 3 mm의 속도로 삽, 발거를 실시한다. (1CKT기준, CKT마다 초기치로 측정)	삽입력 Insertion	1.0 Kgf MAX
	Insertion and Withdrawal force	Insert & withdraw connectors at the speed rate of 25±3mm/minute to PCB hole.(per single circuit, initial)	발거력 Withdrawal	0.1 Kgf MIN.
2	단자고착력	압착된 Ter'l을 매분 25±3 mm의 속도로 wire를 축방향으로 당긴다.(JIS C5402 6.8)	AWG #24	3.0 Kgf MIN.
	Crimping Pull Out Force	Fix the crimped ter'l, apply axial pull out force on the wire at speed rate of 25±3mm/minute.(JIS C5402 6.8)	AWG #26	2.0 Kgf MIN.
3	Terminal 삽입력	하우징에 압착된 Terminal을 삽입하여 측정한다	AWG #28	1.0 Kgf MIN.
	Terminal Insertion Force	Insert the crimped terminal into the housing.	AWG #30	0.5 Kgf MIN.
4	Terminal 유지력	하우징과 Terminal을 조립한 상태에서 매분 25 ± 3mm/min.의 속도로 축방향으로 잡아당겨 측정한다.	1.0 Kgf MIN.	
	Terminal/Housing Retention Force	Apply axial pull out force at the speed rate of 25 ± 3mm/min. on terminal assembled in the housing.		

4.3 ENVIRONMENTAL REQUIREMENTS(환경적 특성)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT	
1	온도상승	최대허용 전류를 통전 후 온도 상승분을 측정한다. (UL498)	30°C MAX	
	Temperature Rise	Measure the temperature rise at the rated current. (UL498)		
2	내 한 성	주위온도 -40 ± 3°C에서 96시간 방치 후 꺼내어 측정한다.	외관	변형 없을 것
	Cold Resistance	Duration: 96 hours; Temperature: -40 ± 3°C	접촉저항	10mΩ max.
3	내 열 성	주위온도 105 ± 2°C에서 96시간 방치 후 꺼내어 측정한다.(MIL-STD-202, 시험법 108A, 조건 A)	외관	변형 없을 것
	Heat Resistance	Duration: 96 hours Temperature: 105 ± 2°C (MIL-STD-202, Method 108A, Condition A)	접촉저항	10mΩ max.
3	Heat Resistance	Duration: 96 hours Temperature: 105 ± 2°C (MIL-STD-202, Method 108A, Condition A)	Appearance	No Damage
			Contact Resistance	10mΩ max.

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4.3 ENVIRONMENTAL REQUIREMENTS (continued)

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT	
4	내 습 성	주위온도 : 60 ± 2°C 상대습도 : 90 ~ 95% 지속시간 : 96시간 (JIS C0022/MIL-STD-202 Method 103B COND.B)	외관	이상없을것
			접촉저항	10mΩ Max.
			절연저항	1000 MΩ Min.
			내전압	4-1-3항 만족할 것
4	Humidity	Temperature: 60 ± 2°C Relative humidity: 90 ~ 95% Duration: 96 hours. (JIS C0022/MIL-STD-202 Method 103B COND.B)	Appearance	No Damage
			Contact Resistance	10mΩ Max.
			Insulation Resistance	1000 MΩ Min..
			Dielectric Strength	Must meet 4-1-3
5	염수분무	주위온도 : 35 ± 2°C에서 5± 1% 중량비의 염수를 48± 1시간 분무하고 시험후 상온에서 물로 씻은후 실온에서 건조시킨다.	외관	이상없을것
			접촉저항	10mΩ Max.
	Salt Spray	48± 1 hours exposure to a salt spray from the 5± 1% solution at 35 ± 2°C	Appearance	No Damage
			Contact Resistance	10mΩ Max.
6	내 암모니아성	주위온도 : 25 ± 2°C에서 28% 암모니아 가스에 40분 방치후 꺼내어 측정한다.	외관	이상없을것
			접촉저항	10mΩ Max.
	Corrosive Atmosphere: Ammonia Gas (NH ₃)	40 minutes in saturated NH ₃ gas by 28% liquid Amonia at 25 ± 2°C	Appearance	No Damage
			Contact Resistance	10mΩ Max.
7	내 아황산성	주위온도 40 ± 2°C에서 50± 5ppm의 아황산가스에 24시간 방치한다.	외관	이상없을것
			접촉저항	10mΩ Max.
	Corrosive Atmosphere: Sulfur Dioxide Gas (SO ₂)	24 hours exposure to 50± 5 ppm SO ₂ gas at 40 ± 2°C	Appearance	No Damage
			Contact Resistance	10mΩ Max.
8	납 땀 성	납땀시간 : 3 ± 0.5sec 납땀온도 : 245 ± 5°C	침적면적 95% 이상	
	Solderability	Soldering Time : 3 ± 0.5 sec Solder Temperature : 245 ± 5°C	95% of immeased area must be no voids, pin holes.	
9	납땀 내열성	납땀시간 : 5 ± 0.5sec 납땀온도 : 260 ± 5°C	이상없을것	
	Resistance to Soldering Heat	Soldering Time : 5 ± 0.5 seconds; Solder Temperature: 260 ± 5°C	No Damage	

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