



PRODUCT SPECIFICATION

CKM 9956 SERIES

Ø2.20~ Ø 2.50mm BOARD IN TERMINAL

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REVISION HISTORY:

REV	REVISION DESCRIPTION	DATE	CREATED/REVISED
A	INTERIM EDITION	2015/5/20	Jimmy Wang
B			
C			
D			

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		APPROVED BY Angus Chen	



1. SCOPE

This specification contains the test requirement of subject connectors when tested under the condition and procedure with terminals crimped on the specified maximum size wire. ;

2. APPLICABLE STANDARDS

MIL - STD - 202 Methods for test of connectors for electronic equipment
MIL - STD - 1344 Test methods for electrical connectors
JIS C0020, C0021, C0025
JIS C5028
JIS C5402

3. APPLICABLE SERIES NO: 9956 SERIES

Product Name	Part No.
Terminal	99560301
	99560302

4. PRODUCT SHAPE, DIMENSIONS AND MATERIALS

*See attached drawings.

5. ACCOMMODATED P.C. BOARD

5.1 Thickness: 1.6 mm (.063 ")
5.2 P.C. Board Layout: See attached drawings

6. RATINGS

6.1 Current rating: 9.0A (AWG #14)
7.0A (AWG #16)
5.0A (AWG #18)

6.2 Voltage rating: 250V AC, DC

6.3 Temperature range:-40°C to +105°C

6.4 Applicable wire: AWG #14 to #18, Insulation O.D.: 3.05~3.75mm Max.

7. PERFORMANCE REQUIREMENTS AND TEST DESCRIPTIONS

The product is designed to meet the electrical, mechanical and environmental performance Requirements as specifics in **8. REQUIREMENTS.**

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8. TEST REQUIREMENTS AND PROCEDURES SUMMARY

TEST ITEM		REQUIREMENT	PROCEDURE
8.1	Examination of Product	Meets requirements of product drawing. No physical damage.	Per EIA-364-18 Visual inspection
ELECTRICAL REQUIREMENT			
8.2	Contact Resistance	10mΩ Max (Initial) 20mΩ Max (Final)	Dry circuit of DC 20 mV max. , 10 mA max.(JIS C5402 5.4)
MECHANICAL REQUIREMENT			
8.3	Terminal crimp Tensile strength	AWG # 14: 15.0 kgf Min. AWG # 16: 12.0 kgf Min. AWG # 18: 9.0 kgf Min.	Fix the crimped terminal, apply axial pull out force on the wire at speed rate of 25±3 mm/minute (Based upon JIS C5402 6.22)
8.4	Terminal Insertion Force	1.2kgf Max.	Press the crimped terminal into the P.C.Board, Retention speed 25±3 mm per minute.
8.5	Terminal Retention Force	1.5kgf Min.	Apply axial pull out force at the speed on the terminal assembled in the P.C.Board, Retention speed 25±3 mm per minute.
ENVIRONMENTAL REQUIREMENTS			
8.6	Temperature rise	Final Temp 105°C max.	Then carried the rated current
8.7	Heat aging	No damage Contact resistance: Less than twice of initial 20mΩ Max (Final)	105 ±2°C , 96 hours(JIS C0021/ MIL-STD-202,method 108A, condition A)
8.8	Humidity	Appearance: No damage Contact resistance: 20mΩ Max (Final)	40±2°C, 90~95% RH, 96 hours measurement must be taken within 30 min. after tested (JIS C0020/MIL-STD-202, method 103 B, condition B)
8.9	Temperature cycling	Appearance: No damage Contact resistance: 20mΩ Max (Final)	Five cycle consists of :(JIS C0025) (1)-40°C+0 / -03°C, ~ 30 min. (2) 25°C, ~ 3 min. (3) 105°C+3 / -0°C, ~30 min. (4) 25°C, ~ 3 min.

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8.10	Salt spray	Appearance: No damage Contact resistance: 20mΩ Max (Final)	Temperature: 35±2°C Solution: 5±1% Spray time: 12±2 Hours Measurement must be taken after water rinse(JIS C5402 7.1/MIL-STD-202, method 101 D, condition B)
8.11	Solder ability	Minimum: 95% of immersed area	Lead-Free Process for Wave Soldering: Soldering time: 3±0.5 second Soldering pot: 245±5°C

9. PRODUCT QUALIFICATION AND REQUALIFICATION TEST SEQUENCE

Test or Examination	Test Group								
	A	B	C	D	E	F	G	H	I
	Test Sequence (a)								
Examination of Product	1	1	1	1,5	1,5	1,5	1,5	1,5	1
Contact Resistance	2	2	2	2,4	2,4	2,4	2,4	2,4	2
Terminal crimp Tensile strength	3								
Terminal Insertion Force		3							
Terminal Retention Force			3						
Temperature Rise				3					
Heat aging					3				
Humidity						3			
Temperature cycling							3		
Salt spray								3	
Solder ability									3
Sample Size	5pcs	5pcs	5pcs	5pcs	5pcs	5pcs	5pcs	5pcs	5pcs

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