

**Jun.22.2004.**

## **microGiGaCN™ I/O Connector Product Characteristics**

Plug:FCN-261R024-G/0

Plug cover:FCN-260C024-A/L0

Jack:FCN-268D024-G/2D

## Environmental Performance

Test Item	Test Condition	Specification
(1) Durability Test	Mated and unmated speed: 600 cycles / hour (Maximum.)	250 cycles
(2) Vibration Test	EIA-364-28D	Frequency : 10~55Hz Amplitude : 0.762mm 3 Directions, 2H each
(3) Shock Test	EIA-364-27B	Acceleration : 490m/s <sup>2</sup> Duration : 11ms Half sine wave
(4) Thermal Shock	EIA-364-32C	-55~+85deg. C, 5cycles
(5) Heat Test	EIA-364-17B	Temperature : 85deg. C Time : 96H
(6) Humidity Test	EIA-364-31B	Humidity : 90~95% RH Temperature : 40deg. C Time : 96H
(7) Humidity Cycle Test	EIA-364-31B	Humidity : 90~95% RH Temperature : -10~65deg. C Cycle : 10 cycles
(8) Salt Spray	EIA-364-26B	Density : 5% Time : 48H
(9) Mixed Flowing Gas (Reference)	EIA 364-65, Class 2a	unmate 5days, mate 2days (after 50cycles mate/unmate)

## Initial Specification

Characteristic	Measurement Method	Specification
Contact resistance	EIA364-23 DC20mV 10mA	Signal contact 80m ohms (MAX.) Ground contact 45m ohms (MAX.)
Insulation resistance	DC100V	1000M ohms (MIN.) Between near contacts
Withstanding Voltage	DC300V 1minute	No defect Between near contacts

## After Test Specification

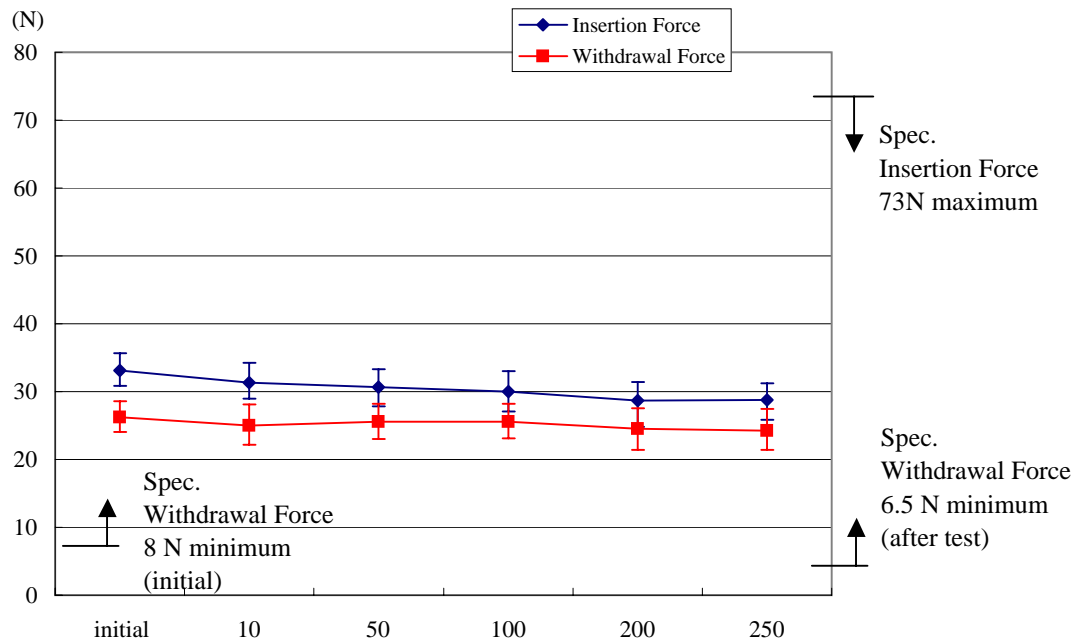
Item	Insertion / Withdrawal force	Contact resistance	Insulation resistance	Dielectric withstanding voltage	Discontinuity	Appearance check
Condition	Table 1	Resistance change 20m ohms (MAX.)	1000M ohms (MIN.)	No defect	1 micro second (MAX.)	No defect
(1) Durability	○	○	-	-	-	○
(2)Vibration	-	○	-	-	○	○
(3) Shock	-	○	-	-	○	○
(4) Thermal shock	○	○	○	○	-	○
(5) Heat	○	○	-	-	-	○
(6) Humidity	-	○	○	○	-	○
(7) Humidity cycle	-	○	○	○	-	○
(8) Salt Spray	-	○	-	-	-	○
(9) Mixed Gas	-	○	-	-	-	○

Table 1

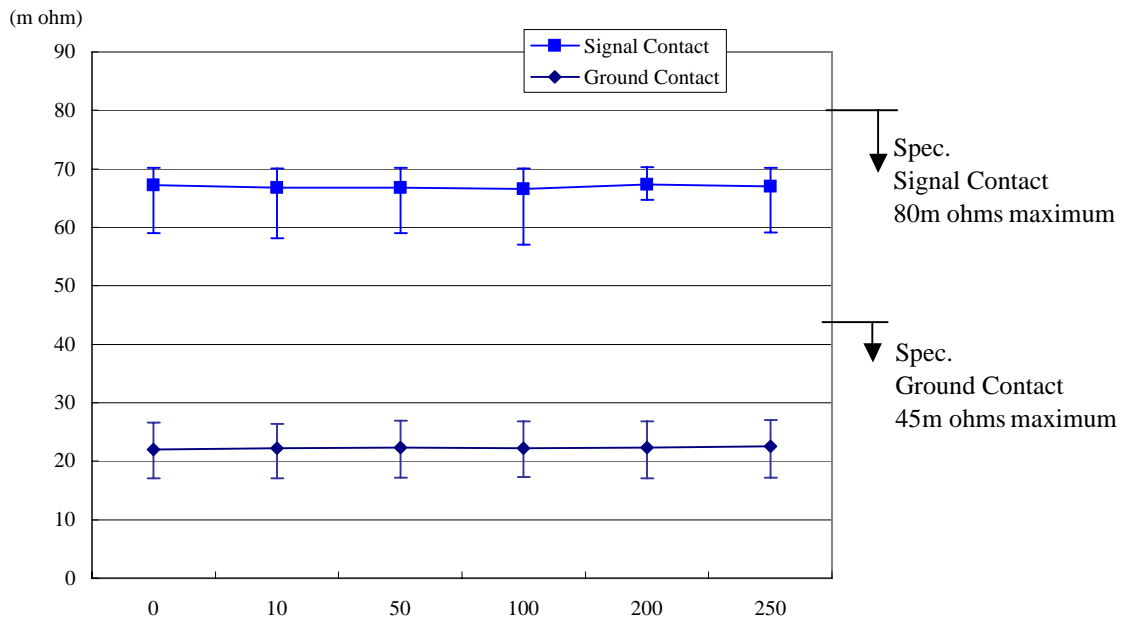
Number of pairs	24
Insertion force (N MAX.)	73
Withdrawal force (N MIN. Initial)	8
Withdrawal force (N MIN. After test)	6.5

TYPE	ITEM : Durability Test	REMARKS
FCN-261R024-G/0	TEST CONDITION SPEED: 600 CYCLES /1HOUR 250 cycles	
FCN-260C024-A/L0		
FCN-268D024-G/2D		
SAMPLE SIZE		
5 PCS.		

1) Insertion / Withdrawal Force



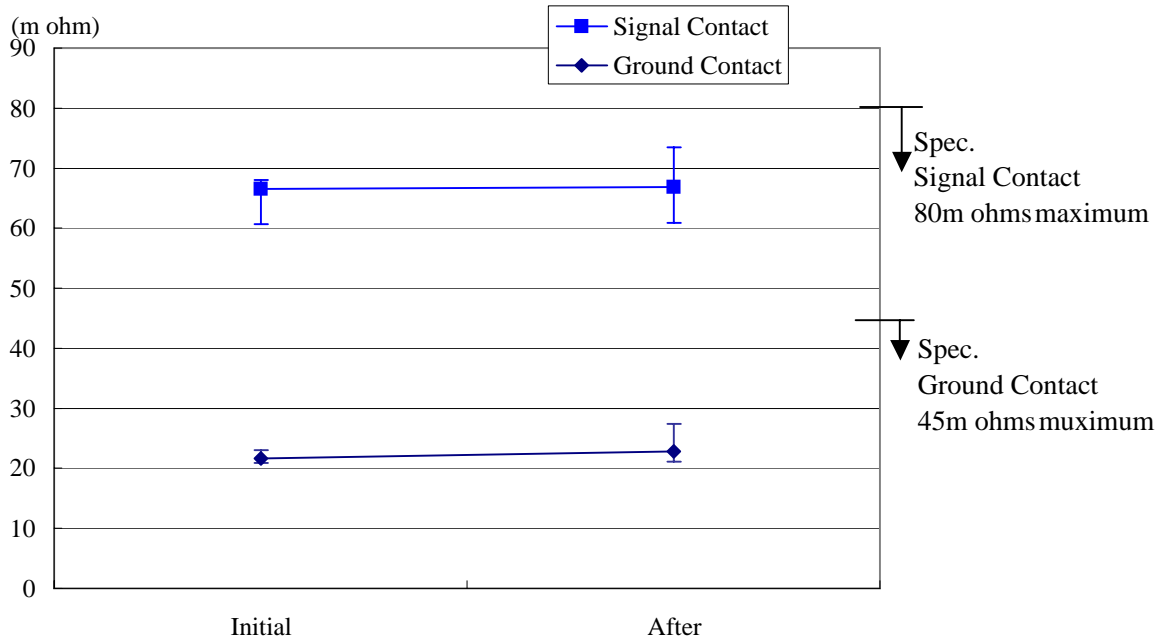
2) Contact Resistance



3) Appearance check : No defect

TYPE	ITEM : VIBRATION TEST	REMARKS
FCN-261R024-G/0	<b>TEST CONDITION</b> Frequency :10~55Hz Amplitude :0.762mm 3Directions,2H	
FCN-260C024-A/L0		
FCN-268D024-G/2D		
SAMPLE SIZE		
5 PCS.		

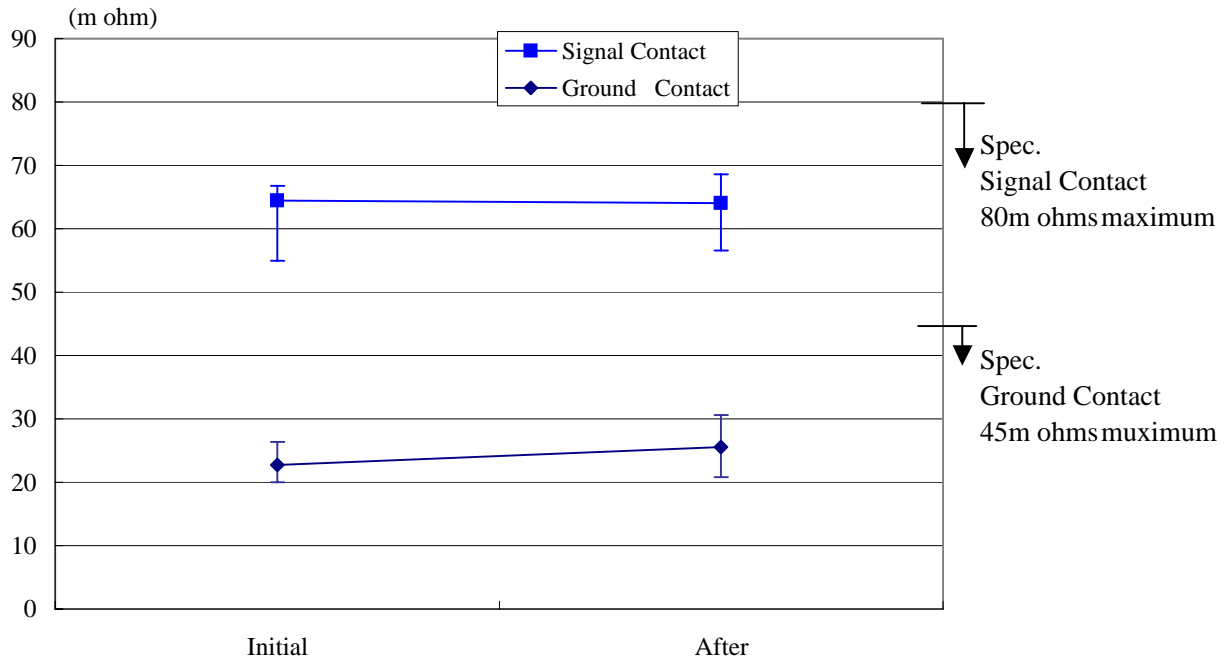
**1) Contact registance**



**2) Appearance check : No defect**

**3) Discontinuity :Instantaneous breakdounn Max. 1 micro sec. : Normal**

TYPE	ITEM : SHOCK TEST	REMARKS
FCN-261R024-G/0	<u>TEST CONDITION</u> Acceleration: 50m/s <sup>2</sup> Duration : 11ms Half sine wave	
FCN-260C024-A/L0		
FCN-268D024-G/2D		
SAMPLE SIZE		
5 PCS.		

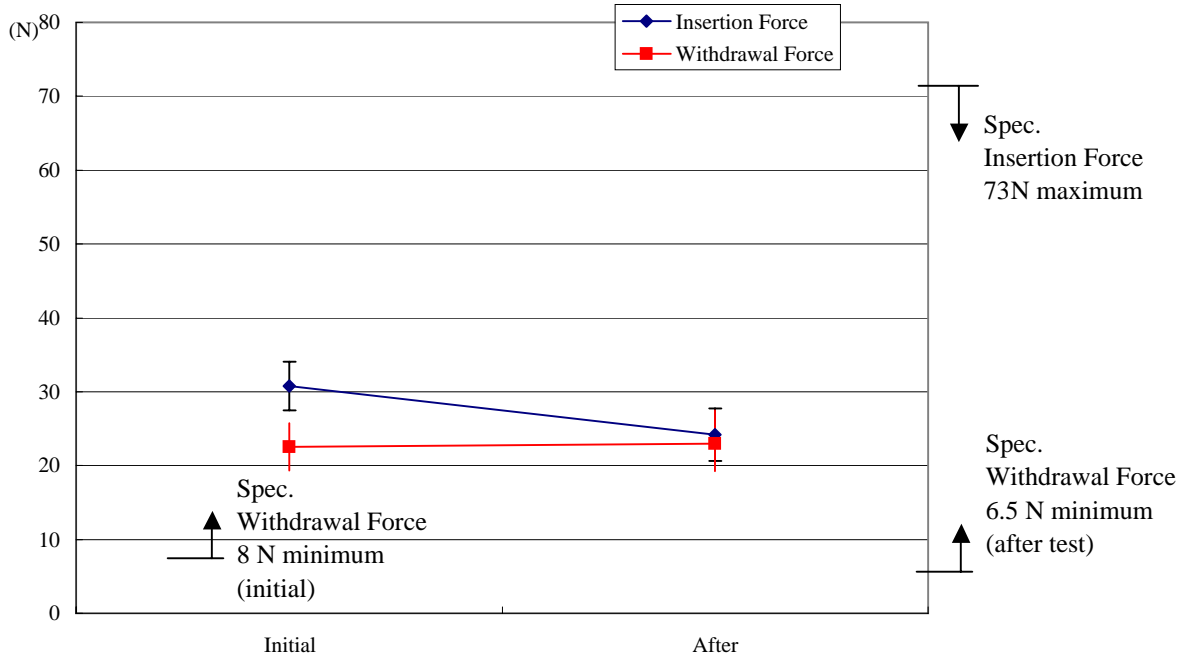


2) Appearance check : No defect

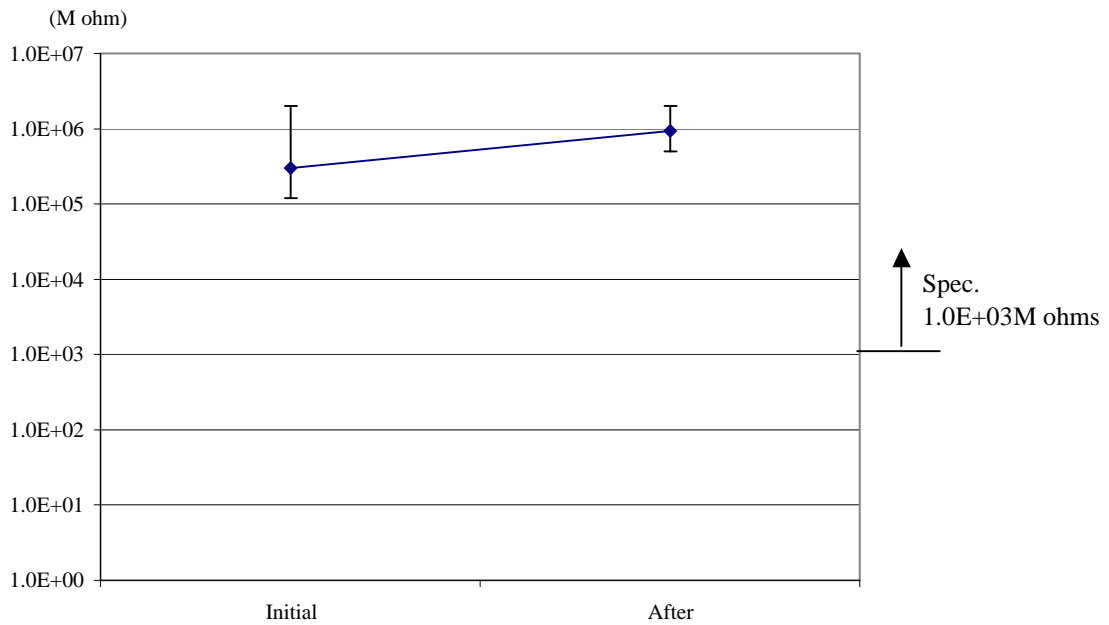
3) Discontinuity : Instantaneous breakdown Max. 1 micro sec. : Normal

TYPE	ITEM : Thermal Shock	REMARKS
FCN-261R024-G/0	<u>TEST CONDITION</u> -55~85deg.C 5 cycles	
FCN-260C024-A/L0		
FCN-268D024-G/2D		
SAMPLE SIZE		
5 PCS.		

**1) Insertion/Withdrawal Force**

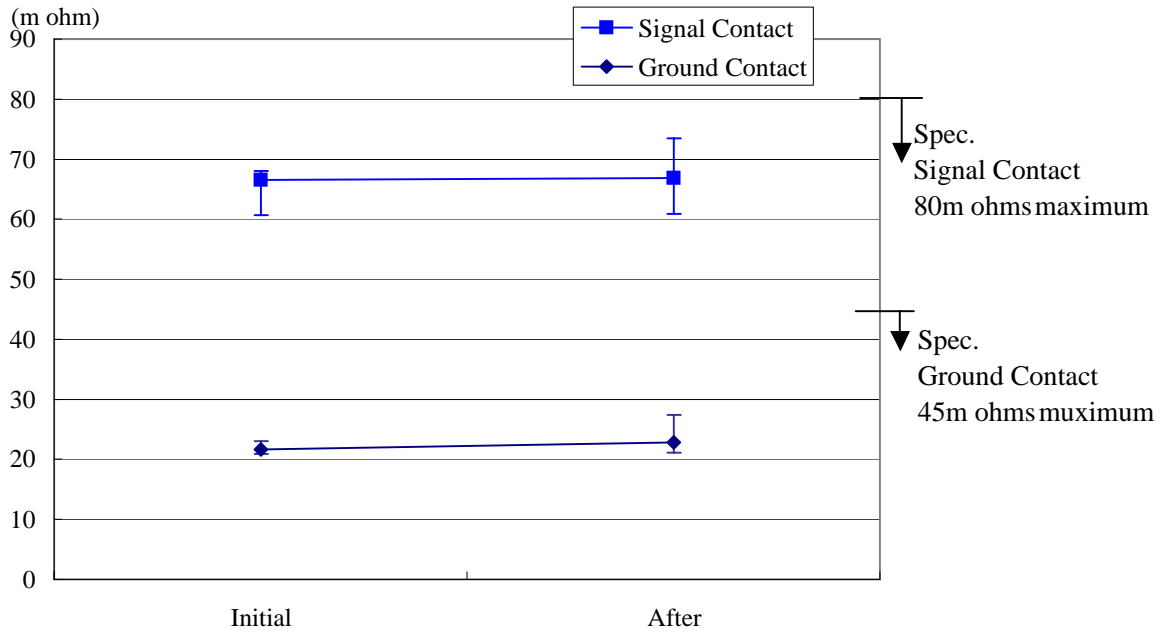


**2) Insulation resistance**



TYPE	ITEM : VIBRATION TEST	REMARKS
FCN-261R024-G/0	<u>TEST CONDITION</u> Frequency :10~55Hz Amplitude :0.762mm 3Directions,2H	
FCN-260C024-A/L0		
FCN-268D024-G/2D		
SAMPLE SIZE		
5 PCS.		

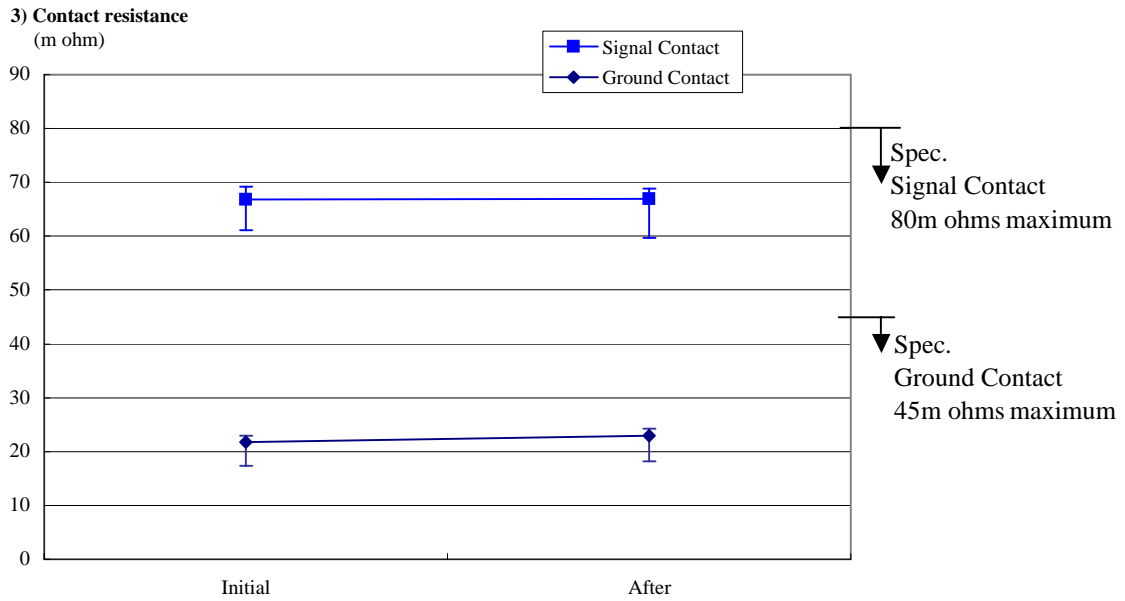
**1) Contact resistance**



**2) Appearance check : No defect**

**3) Discontinuity :Instantaneous breakdown Max. 1 micro sec. : Normal**

TYPE	ITEM : Thermal Shock	REMARKS
FCN-261R024-G/0 FCN-260C024-A/L0 FCN-268D024-G/2D	<u>TEST CONDITION</u> -55~85deg.C 5 cycles	
SAMPLE SIZE		
5PCS.		

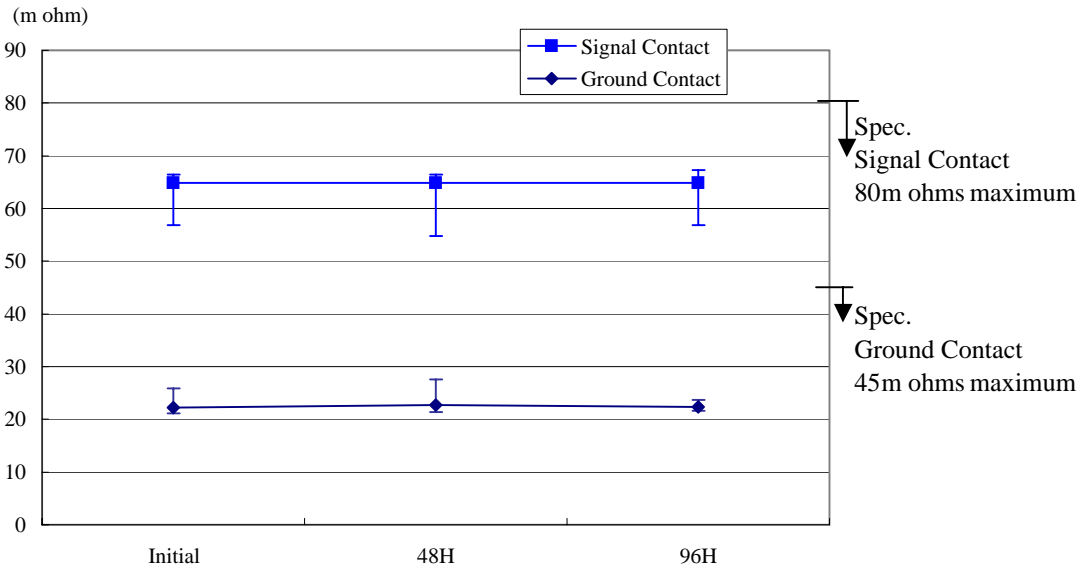


4) Dielectric withstanding : No defect

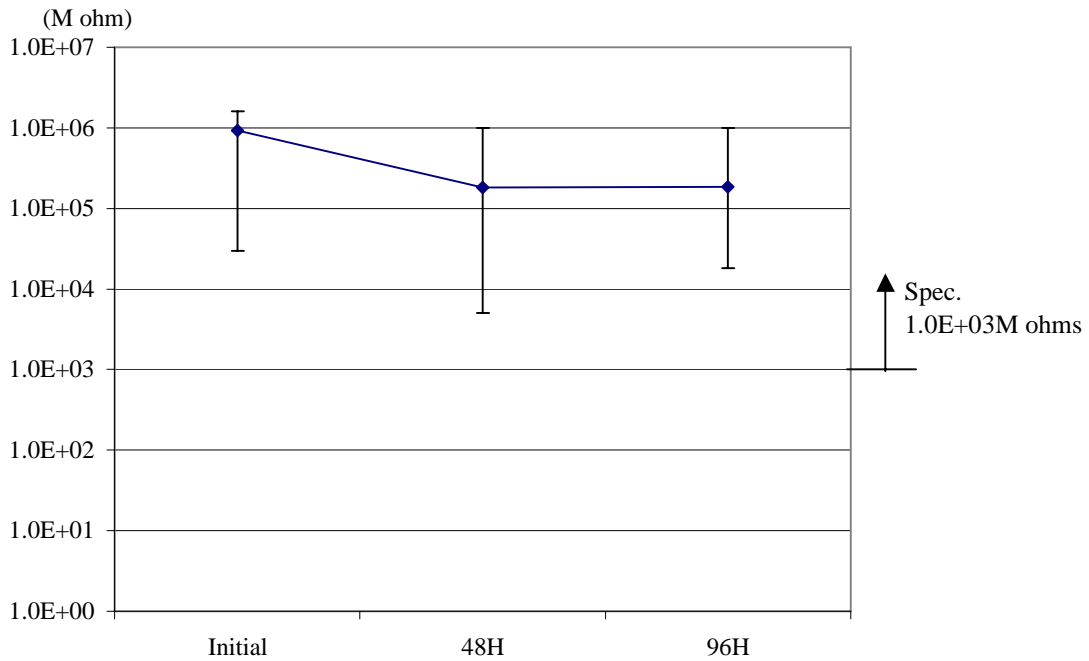
5) Appearance check :No defect

TYPE	ITEM : HUMIDITY TEST	REMARKS
FCN-261R024-G/0	<u>TEST CONDITION</u> Humidity :90~95% RH Temperature:40deg.C Time : 96H	
FCN-260C024-A/L0		
FCN-268D024-G/2D		
<u>SAMPLE SIZE</u>		
5 PCS.		

**1) Contact resistance**



**2) Insulation resistance**

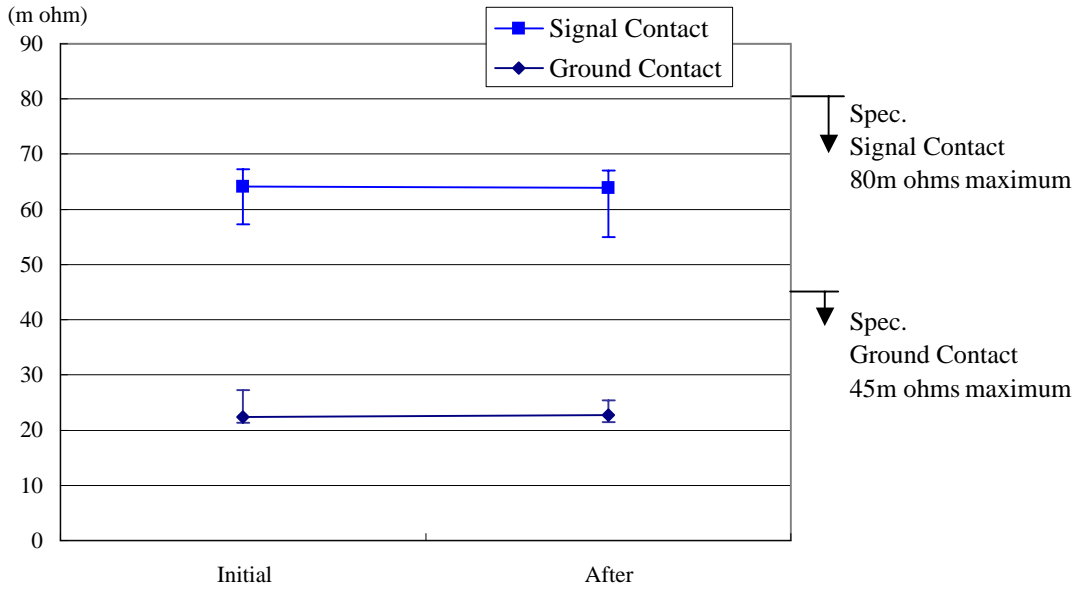


**3) Dielectric withstanding : No defect**

**4) Appearance check : No defect**

TYPE	ITEM : Salt Splay	REMARKS
FCN-261R024-G/0	TEST CONDITION Density : 5% Time : 48H	
FCN-260C024-A/L0		
FCN-268D024-G/2D		
SAMPLE SIZE		
5 PCS.		

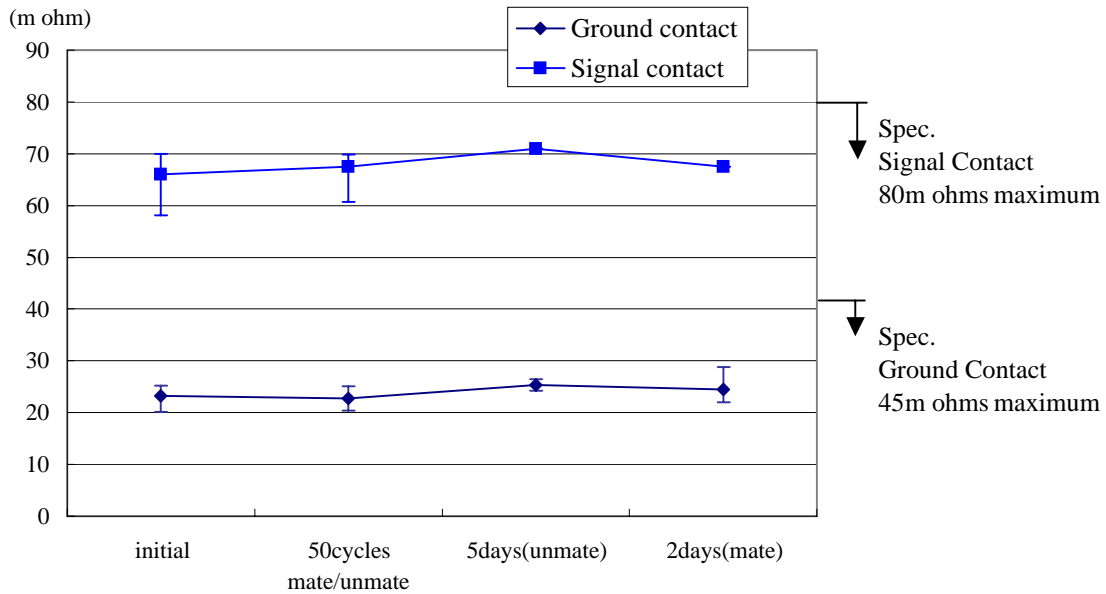
**1) Contact resistance**



**2) Appearance check : No defect**

TYPE	ITEM : Mixed Flowing Gas	REMARKS
FCN-261R024-G/0	<b>TEST CONDITION</b> Time : 5days(unmate)+2days(mate) (after 50cycles mate/unmate)	
FCN-260C024-A/L0		
FCN-268D024-G/2D		
SAMPLE SIZE	Cl <sub>2</sub> 10+/-3ppb, NO <sub>2</sub> 200+/-50ppb,	
5 PCS.	H <sub>2</sub> S 100+/-5ppb, SO <sub>2</sub> 100+/-20ppb	

**1) Contact resistance**



**2) Appearance check : No defect**