

# RELIABILITY TEST REPORT

Report No : < K200218015 >

Log-in Date : 2020/02/18

Report Date : 2020/02/24

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- 2004 Certified by ISO 9001 and IECQ 17025.
- 2006 Elected as the Distinguished Enterprise by the Industry Development Bureau (IDB).
- 2006 Awarded #32 in the Taiwan Top 50 and #157 in the Asia Top 500 Fastest Growing Companies by Deloitte.
- 2008 Awarded the best performance company of Industrial Excellence Award by the Economy Ministry's Industry Development Bureau (IDB).
- 2009 Listed on the Taiwan OTC market (3587)
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- 2013 A+ companies in Taiwan by Global Views Monthly Magazine.
- 2015 Certified by ISO 27001.



ISO/IEC 27001



IECQ 17025



ISO 9001





## MA-tek Core Team

### ■ CEO - Dr. Yong-Fen Hsieh



More than 20 years of experience in various fields of IC(Si), TFT-LCD, LED(III-V, II-VI), LCOS, GaAs, and Ge/ Metal contacts system.

Specialized in TEM analysis, fault isolation/failure analysis, analytical lab operation, quality management (QE, QA, QS, TQM), and materials-related fundamental research.

### ■ MA - Dr. J.C. Hu



More than 10 years of experience in various fields of Advanced IC exploratory & processing, LED, PV, industry, international technology collaboration, materials analysis.

Specialized in TEM, HRTEM, EDX, EELS, PFA and SEM related analysis, materials science, applied chemistry.

### ■ FA - Max Kuo



More than 10 years of experience in IC EFA (EMMI, OBIRCH, LCD, etc.) and PFA (Structure and Process diagnosis) analysis.

Specialized in fault isolation/failure analysis, SEM, chemical analysis, FA total solution consulting and coordination.

### ■ RA - Woody Chuang



More than 20 years of experience in PCB, CCL, FCCL, FPCB and Server ODM/OEM.

Specialized in PCB/FPCB related reliability test and failure analysis, server component reliability research and material analysis.

### ■ SA - Ming-Ching Huang



More than 10 years of experience in surface analysis of IC(Si), TFT-LCD, LED, LCOS, GaAs, and solar cells.

Specialized in SIMS, Auger, ESCA/XPS, Scanning Capacitance Microscopy, Atomic Force Microscopy, Magnetic Field Microscopy, and SRP.



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## 1 Background Information

### 1.1 Client Information

TOCALO & HAN TAI TW CO., LTD

User Name : Lily Lin

TEL : +886-3-758-0791 Ext.1075

### 1.2 Testing Inquiry

Model Name	Test Item	Quantity
碳複合熱輻射漆(油性)	Salt Spray Test	5 pcs

### 1.3 Pass/Fail Criteria

N/A

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## 2 Testing Summary

Test Item	Condition	Model Name	Judgment
Salt Spray Test	Temperature : 35°C±2°C Consistency of solution : 5%±1% PH : 6.5 ~ 7.2 Salt Solution Collection : 1-2ml/hr/80cm2 Duration : 48 hours	碳複合熱輻射漆(油性)	N/A

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### 3 Testing Items, Conditions, and Raw Data

#### 3.1 Salt Spray Test

##### 3.1.1 Test System

Brand/Model No.	Calibration Date
TEN BILLION / SST-B	2019/05/02~2020/05/01

##### 3.1.2 Test Method and Condition

Specification : The test based on Customer's specification.

Environmental Temperature and Humidity : 25°C±5°C / 55%R.H±10%

Test Condition :

Test	Condition	
Salt Spray Test	Temperature	35±2°C
	Salt Solution	5±1%
	PH	6.5~7.2
	Salt Solution Collection	1-2ml/hr/80cm <sup>2</sup>
	Total Time	48 Hours

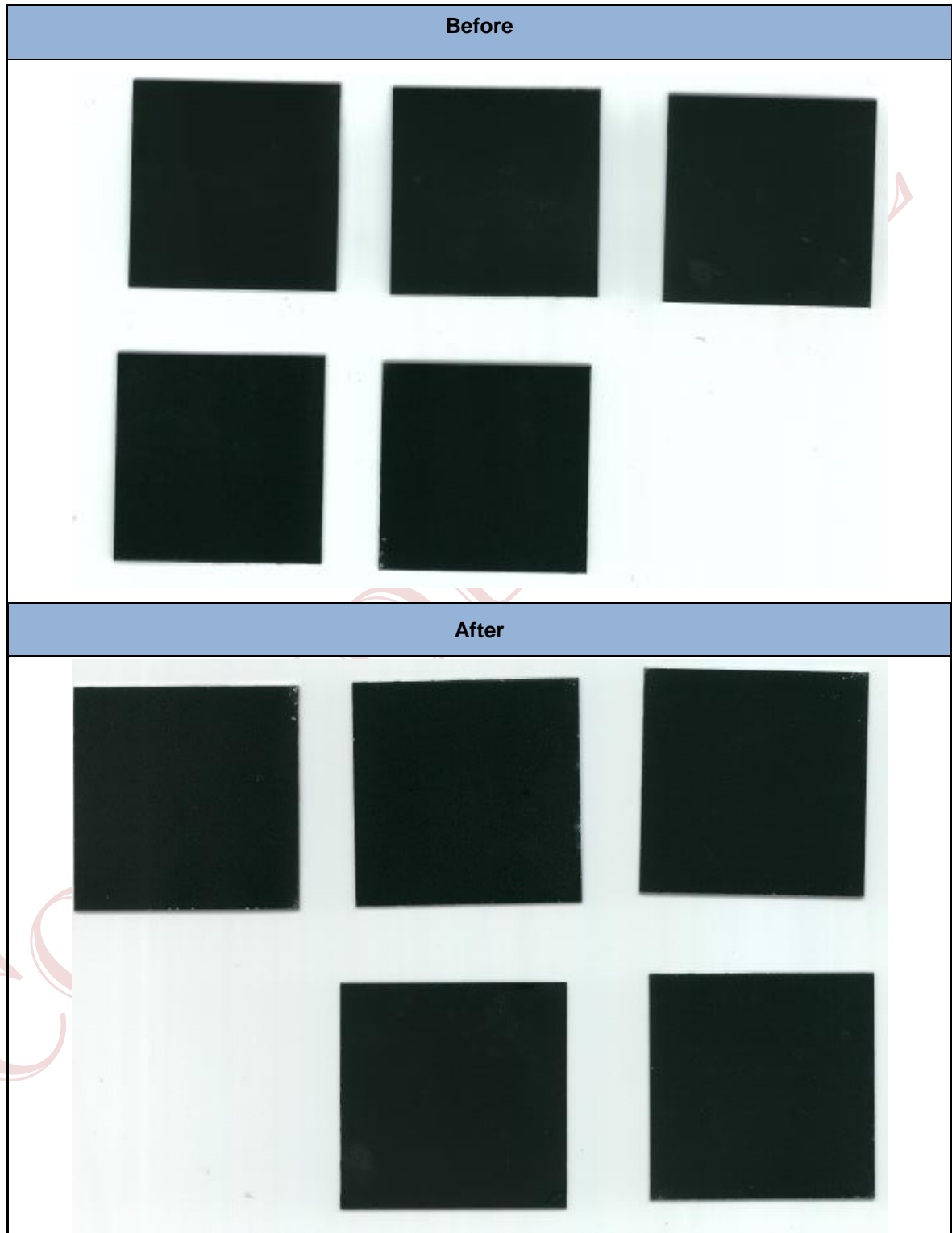
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### 3.1.3 Test Results

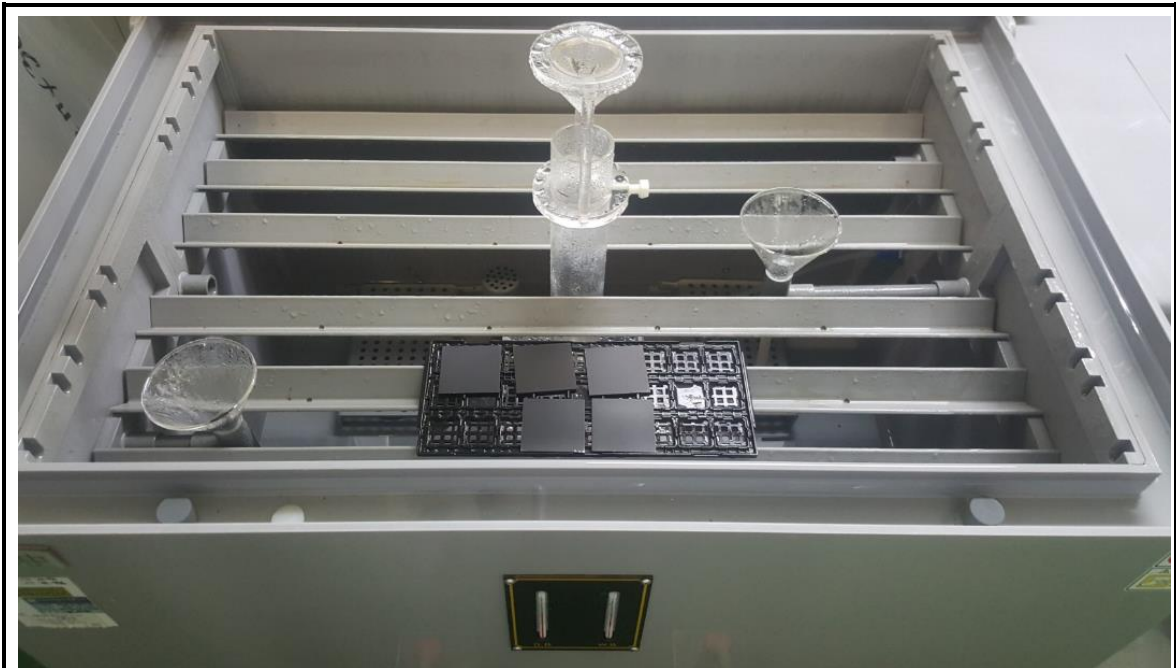
After test, found that the appearance of rust samples by visual inspection.

Electrical verification will be conducted by client.





### 3.1.4 Pictures of Salt Spray Test



Specimen Setup of Salt Spray Test



Chamber Setup of Salt Spray Test