

Test Report

Verified Code:601990

Report No.:H20240903144001-04EN

Customer: ProTech CO., Ltd

Address: No. 18, Baoying Road, Dawang High-Tech District, Zhaoqing, Guangdong

Sample Name: Sinora Hard Shell Case

Sample Model: SIN-04640-19BK-E

Receive
Sample Date: Sept. 12, 2024

Test Date: Sept. 19, 2024~Sept. 30, 2024

Reference
Document: ISO 20653: 2013

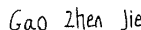
Test Result: Meet the requirements

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1 IP6X Test

1.1 Test Condition

According to ISO 20653: 2013.

1.1.1 Before test, perform visual check for samples.

1.1.2 Test conditions of IP6X Test as follows.

1.1.2.1 Anti-touch protection level: Probe the shell of the test article with a metal wire of 1.0mm in diameter with a force of $1N \pm 0.1N$;

1.1.2.2 Anti-foreign object protection level: place the test item in the test box and test it according to the conditions in Table 1-1.

1.1.3 After test, perform visual check and function check for samples.

Table 1-1 IP6X test conditions

Tust Dust	Dust dosage	Test time
Arizona Powder	2kg/m ³	Take 6s dust raising, 15min static as a cycle, run 20 cycles

1.2 Sample Information

Sample information is shown in Table 1-2.

Table 1-2 Sample Information

Sample Name	Model	Quantity	Test No.
Sinora Hard Shell Case	SIN-04640-19BK-E	1pc	H202409031440-0005

1.3 Test Requirements

According to ISO 20653: 2013.

1 mm metal probe shall not enter the shell of the test article and no dust shall penetrate into the interior of the test article after the test.

1.4 Test Result

The test result is shown in Table 1-3.

Table 1-3 Test Result

Test No.	Test Result	Conclusion
H202409031440-0005	The 1mm diameter detection line did not enter the shell of the test article, and no dust entered the interior of the test article after the test.	Meet the requirements

1.5 Test Photos



Fig.1-1 Sample before test



Fig.1-2 Unpacking and inspection after test



Fig.1-3 Pre-test metal probe inspection



Fig.1-4 Test set-up diagram

2 IPX7 Test

2.1 Test Condition

According to ISO 20653: 2013.

2.1.1 Before test, perform visual check for samples.

2.1.2 Test method: fix the test article in the immersion pool and conduct the test according to the conditions in Table 2-1;

2.1.3 After test, perform visual check and function check for samples.

Table 2-1 IPX7 test conditions

Distance between the highest point of the box and the water surface	Test time
1000mm	30min

2.2 Sample Information

Sample information is shown in Table 2-2.

Table 2-2 Sample Information

Sample Name	Model	Quantity	Test No.
Sinora Hard Shell Case	SIN-04640-19BK-E	1pc	H202409031440-0005

2.3 Test Requirements

According to ISO 20653: 2013.

The test article is temporarily immersed in water; water must not penetrate in such a way as to cause adverse effects.

2.4 Test Result

The test result is shown in Table 2-3.

Table 2-3 Test Result

Test No.	Test Result	Conclusion
H202409031440-0005	No water ingress inside the sample after the test.	Meet the requirements

2.5 Test Photos



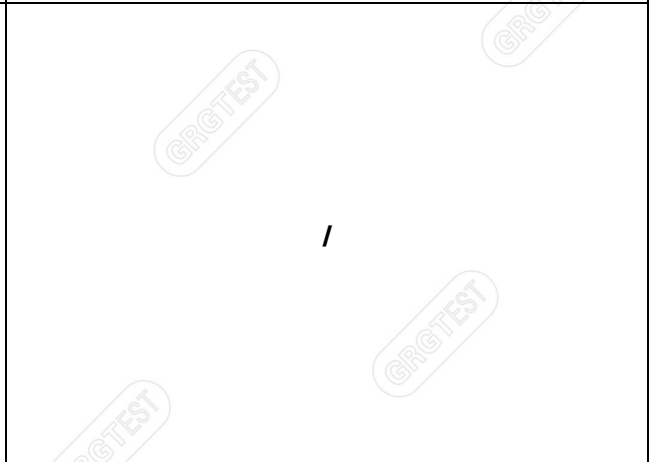
Fig.2-1 Sample before test



Fig.2-2 Unpacking and inspection after test



Fig.2-3 Test set-up diagram



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3 Test Instrument & Equipment

List of Instrument for Testing Equipment					
No.	Testing Item	Instrument/Equipment	Type	Serial No.	Calibration Valid Date
1	IP6X	Dust test chamber	GT1321	GT20170703001	2023-12-16~2024-12-15
		IP4X test sonde	CX-T4D	CX2306394	2024-06-19~2025-06-18
2	IPX7	Leaching tank	/	SZ008	/
		Steel rule	0~1000mm	2482515	2024-02-21~2025-02-20
		Stopwatch	PC2810	979862	2024-03-14~2025-03-13

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